

# CITY OF GREEN BAY - SAFETY MANUAL

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### **MISSION STATEMENT**

The City of Green Bay is committed to the safety and welfare  
of all employees, residents and visitors.  
Every city employee has the responsibility  
to provide and support a culture  
of injury prevention and safety consciousness.

## **SECTION 1            SAFETY PROGRAM**

### **1.1        PURPOSE**

The purpose of this program and manual is to set forth policies and procedures to be followed by all City personnel regarding safety and accident prevention relating to persons and property.

### **1.2        ORGANIZATION AFFECTED**

This policy applies to all departments within the City of Green Bay.

### **1.3        POLICY**

The City is committed to providing a safe work environment for all its employees. The prevention of accidents and injuries to our employees is of utmost importance. The policy provides general guidelines for the purpose of preventing injury to persons and property.

### **1.4        RESPONSIBILITIES**

#### **1.4.1                    SAFETY MANAGER**

The Safety Manager shall be responsible for the direction and coordination of the City's employee safety and health program in all its phases. This will include, but is not limited to the program development, safety inspections, accident investigations, safety rule development, safety training, and records management.

#### **1.4.2                    DEPARTMENT/DIVISION HEAD**

Each department head is responsible for the safety of the work performed under their departments. This shall include, but not be limited to the following: Providing employees with a safe working environment, ensuring compliance with Federal, State and City safety standards within their department, ensuring their employees receive proper safety instruction in the performance of their jobs, seeing employees perform their job with regard for their own safety and for the safety of others and ensuring compliance with City safety policies, procedures, rules and programs.

#### **1.4.3                    SUPERVISOR**

Supervisors are responsible for the safe maintenance of the physical work environment and the safe performance of employees under their supervision. Accident prevention activities and responsibilities of supervisors shall include, but is not limited to: accident investigation and completion of subsequent reports, corrective actions or recommendation thereof, inspections of the premises and equipment therein, the requirement of all employees under their supervision to report all injuries, instruct employees in the safe performance of their work, and keep in contact with those employees under their supervision to determine general physical and attitudinal fitness for carrying work out safely.

#### **1.4.4                    EMPLOYEES**

Each City Employee is responsible for performing their job with regard for their own safety, the safety of other employees and the public. All employees are expected to abide by all

Federal, State and City safety standards/regulations applicable to their job. This includes but is not limited to: reading and following City safety rules, wearing required personnel protective equipment, immediately reporting all accidents and injuries and watching out for and reporting all unsafe conditions they observe.

Employees are also encouraged to provide input and suggestions to promote, prevent and/or reduce injuries.

## **1.5 SAFETY COMMITTEES**

### **1.5.1 CITY WIDE SAFETY COMMITTEE**

A City Wide Safety Committee will be established and will be tasked with reviewing the Safety Program, projects and policies and to make recommendations and to provide feedback to the Safety Manager with regard to the Safety Program and Safety Policies.

This committee along with Senior Staff will review loss experience by department regarding cost analysis figures such as loss runs, accident reports and exposures in the areas of worker's compensation, fleet management and general liability.

### **1.5.2 DEPARTMENTAL SAFETY COMMITTEE**

Departmental Safety Committees may be organized within any department. Each departmental committee will consist of a combination of management and line personnel. The committees shall strive to meet regularly based on staff availability. Meetings shall be formal in that agendas and notes are prepared for the meeting and alternates designated when staff is unavailable. The function of these committees will be to discuss safety and health issues unique to their departments in an effort to recommend necessary changes or improvements, review accidents within their department in an effort to determine how to prevent similar occurrences, to assist in the evaluation of the progress of their departmental safety and health programs, present topics, to assist in answering questions and to provide recommendations to senior leadership for improvements in safety, disseminate information concerning occupational safety and health to employees and perform safety audits and facility inspections.

## **SECTION 2 HAZARD IDENTIFICATION**

### **2.1 WORKSITE ANALYSIS**

Worksite analysis is a combination of systematic actions that provide the information needed to recognize and understand existing and potential hazards. While these actions may appear complicated, they likely consist of activities that already are being performed. These actions may include: hazard identification, regular safety and health inspections, employee reports of hazards and injury and illness trend analysis.

### **2.2 HAZARD IDENTIFICATION**

To complete a hazard identification analysis, three components should be considered. **First**, an inventory of hazards is to be completed. **Second** is to complete a change

analysis each time there is a change of facilities, equipment, processes or materials. The intended change analysis should be conducted prior to new hazards being introduced. **Finally**, a routine job hazard analysis should be conducted. This analysis divides a job into tasks and steps and then analyzes the potential hazards associated with each step or task.

### **2.3 REGULAR HEALTH AND SAFETY INSPECTION**

General site and field inspections should be performed regularly. Those completing the inspections should be familiar with established policies and be able to recognize new hazards. Employees should be involved whenever possible in the site and field inspections. Regular reports of positive and negative findings are to be communicated to both employees and managers.

### **2.4 EMPLOYEE REPORTING OF HAZARDS**

Employee involvement in the City of Green Bay's Safety Program is imperative. Employees should report any hazards they see to their supervisor as quickly as possible. A timely investigation will be conducted and employees shall be informed of the corrective action(s) being taken to address the safety hazard.

### **2.5 INJURY AND ILLNESS TREND ANALYSIS**

It is useful to review past injury and illness trends to predict and prevent future occurrences. Commonly, trends such as date of injury, mechanism of injury, body part and root cause are reviewed. Common or obvious trends should be addressed with priority. Injury and illness trends can be completed at the department/division level or can be completed city-wide. Results of the analysis should be communicated with employees, managers and departmental safety committees for recommendations.

### **2.6 HAZARD PREVENTION AND CONTROL**

Once the major hazards have been identified, control and/or elimination of the hazards are required. Preference is given to elimination or substitution of the hazard whenever possible. However, given the nature of municipal functions, this is not always possible. Therefore, the City must look to controlling the hazards through effective engineering controls (e.g., ventilation), administrative controls (e.g., job rotation) and personal protective equipment controls (e.g., gloves and face shield). Lastly, preventative maintenance is a must to control and prevent most major hazards. Therefore, an effective preventative maintenance program for facilities, boilers, vehicles, heavy equipment, etc. must be implemented and maintained.

## **SECTION 3 REPORTING OF INJURY/ILLNESS**

**Injuries must be reported by the employee to the employee's supervisor, no matter how minor.**

Any employee that suffers an injury on the job, whether s/he feels it is significant enough to require treatment is required to report the injury immediately to their supervisor. The employee will fill out the Report of Occupational Injury or Illness form and file the report with their supervisor. The Employee Report of Injury will be routed to Risk Management

located in the Human Resource Department. Injuries not reported on a timely basis may not be compensable under Worker's Compensation. Failure to report injuries in a timely manner may subject an employee to disciplinary actions.

### **3.1 EMERGENCY MEDICAL TREATMENT**

For severe on-the-job injuries such as hemorrhaging, unconsciousness, severe burns, or other injury Emergency Room physicians relative to the injury will be accepted by the City.

### **3.2 PERSONAL PHYSICIAN**

If the employee so chooses they may see their own physician. After the employee has scheduled an appointment, the supervisor or designee will provide the injured employee with the "City of Green Bay – Return to Work Recommendations Record" form to accompany the employee to this and all subsequent medical appointments. This form is to be completed by the attending physician and returned by the employee to their supervisor.

### **3.3 OUTSIDE OF NORMAL BUSINESS HOURS**

For injuries occurring outside of normal business hours that require non-emergency medical attention such as sprains, minor burns or minor broken bones, the employee may be referred to Prevea Urgent Care where no appointment is needed. If the non-emergency medical need is greater than what is can be administered, the employee should be referred to any of the hospitals' emergency room for immediate care.

Prevea Ashwaubenon\* Health Center – Urgent Care  
2502 S Ashland Ave, Green Bay  
(920) 496-4700 No appointment needed.  
Hours of Operation: Monday – Friday: 8:00 am to 8:00 pm  
Weekends: 8:00 am to 4:00 pm  
\*Also open Holidays: 8:00 am to 4:00 pm

Prevea East DePere Health Center – Urgent Care  
3860 Monroe Road (County Road GV), DePere  
(920) 496-4700 No appointment needed.  
Hours of Operation: Monday – Friday: 8:00 am to 8:00 pm  
Weekends: 8:00 am to 4:00 pm

Prevea East Mason Health Center – Urgent Care  
3021 Voyager Drive, Green Bay  
(920) 496-4700 No appointment needed.  
Hours of Operation: Monday-Friday: 8:00 am to 8:00 pm  
Weekends: 8:00 am to 4:00 pm

Prevea Howard Health Center – Urgent Care  
2793 Lineville Road, Green Bay  
(920) 496-4700 No appointment needed.  
Hours of Operation: Monday – Friday: 8:00 am to 8:00 pm  
Weekends: 8:00 am to 4:00 pm

### **3.4 INJURED EMPLOYEE TRANSPORT FOR NON-EMERGENCY MEDICAL TREATMENT**

Upon notification of an injured employee at the worksite in need of non-emergency medical treatment, the supervisor or designee will transport the injured employee for medical attention.

For all follow-up medical examinations the employee will be responsible for their own transportation for these appointments.

### **3.5 REPORT FILLING**

The "Report of Occupational Injury or Illness Form" is required to be filed for all injuries no matter how slight. It is the supervisor's responsibility to ensure that this report is completed within one business day following the injury. In no instance will a verbal report of injury be accepted in lieu of a written report. If medical treatment is received relative to a work-related incident the employee will call 448-3125 or stop in at Human Resources Room 500, City Hall, within twenty-four (24) hours after receiving medical treatment. If the injury occurs over a weekend or holiday, the employee will contact Human Resources the following business day. A copy of all return to work forms for work-related injuries will be forwarded to Human Resources by the supervisor as soon as possible.

### **3.6 LOST TIME INJURIES**

If through receipt of a completed physician record form the supervisor learns the employee will lose time from work the supervisor will contact their department head and Human Resources as soon as possible. If an employee is off of work for any length of time due to the injury, the employee must report regularly to their supervisor or designee. The employee will keep the supervisor fully informed as to the progress of the healing period, pending exams, etc. If an employee experiences loss of time from work due to the work-related injury, the employee will notify their supervisor of their options to make themselves whole. Employees and Management should refer to applicable labor contract or personnel policy for additional information.

## **SECTION 4 ALTERNATIVE DUTY (LIGHT DUTY) PROGRAM**

The following will outline the requirements for assignment to alternative duty when an employee is capable to return to work with temporary physical limitation following a work-related or off-duty injury of illness. Work-related injuries or illness will have priority in placement for Alternative Duty. Alternative Duty applies to all City of Green Bay regular full-time and regular part-time employees.

### **4.1 DEFINITION**

For the purpose of this program, alternate duty shall be defined as any assignment in which the employee is not required to meet all physical demands of his/her job or perform functions which are normally a part of his/her job as outlined in the City position description. Participation in the alternative duty program shall not cause the employee to sacrifice wages and/or sick time that would not have been sacrificed otherwise; employees

temporarily placed on alternative duty will receive regular full-rate compensation.

## **4.2 QUALIFICATION**

An employee will qualify for alternate duty when a physician indicates on a Return to Work Recommendation record the employee is not capable of performing at full capacity. The City reserves the right to schedule an exam with a medical practitioner of its choice.

## **4.3 RESPONSIBILITIES**

### **4.3.1 EMPLOYEE**

Employees are expected to comply with requirements of the Safety and Human Resources Offices with respect to reporting requirements and physician visits. It is also expected employees will comply with physician's restrictions, advice and orders.

### **4.3.2 DEPARTMENT DIVISION INVOLVED**

Department Heads will work in cooperation with the Human Resources Department in placing work-related alternative duty employees on jobs in keeping with their restrictions. Supervisory personnel will ensure employees are working within their assigned restrictions and will ensure the period of alternative duty does not exceed that required by the physician. Supervisory personnel will also encourage employees to return to work as soon as possible. Supervisory personnel will also ensure that employees furnish written doctor's return to work forms indicating return to work dates and work restrictions if any.

### **4.3.3 HUMAN RESOURCE DEPARTMENT**

The Human Resources Department and the involved Department Head will be responsible for placing work-related alternate duty employees on jobs in keeping with the restrictions imposed by the physician. Additionally Human Resources may:

1. Contact the employee's physician as necessary to explain the City's willingness to place employees on alternative work duty and to clarify the physical restrictions of the employee including specification of restriction period or establishment of a review date on which restrictions will be considered necessary.
2. Perform necessary follow-up on all employees with work restrictions to determine if restrictions are to continue or to determine when the employee will be able to return to an unrestricted activity.
3. Work in cooperation with the Department head to place the employee on a temporary position in keeping with their restriction imposed by the physician.

### **4.3.4 HUMAN RESOURCE DIRECTOR**

The Human Resource Director may redesign the job description to accommodate work parameters and may negotiate these parameters if necessary under union contracts. Subject to the appropriate agreement, employees will be placed on alternative duty in the following order of consideration:

1. Placing the employee on their regular job.
2. Transfer to a different job in the same section.
3. A position within the employee's collective bargaining unit, if applicable.
4. A position throughout the City.

## **SECTION 5            REPORTING OF VEHICLE ACCIDENTS**

### **5.1        RESPONSIBILITIES**

#### **5.1.1            EMPLOYEE**

Whenever any City equipment is involved in an accident, it shall be the responsibility of the driver to notify:

1. Department Supervisor
2. Police Department

Under no circumstances will an employee of the City indicate to the other party the accident will be covered by insurance or the City will take care of it. In addition, the employee will refrain from admitting liability or making any statements about the accident at the scene of the accident other than to the investigating police officer.

#### **5.1.2            SUPERVISOR**

The supervisor will be responsible for completing a Vehicular Incident/Damage Report. This form shall be completed for all vehicle accidents involving a municipal employee, injury to a citizen or damage to property related to municipal operations.

Under no circumstances will an employee of the City indicate to the other party the accident will be covered by insurance or the City will take care of it. In addition, the employee will refrain from admitting liability or making any statements about the accident at the accident scene other than to the investigating police officer.

### **5.2        STATEMENT AND RELEASES**

An employee shall not give a statement to a representative of the other party's insurance carrier unless approval from the City's Law Department has been obtained. In addition, no employee other than the City's Law Department is authorized to sign a release of all claims.

### **5.3        CLAIM AGAINST THE CITY**

If the other party feels that they have a claim against the City, refer the party to the Law Department (448-3080).

## **SECTION 6            REPORTING A NEAR-MISS**

Near-miss: an unplanned event that, under slightly different circumstances, may have caused injury to a person or damage to property.



An effective method to reduce and control losses is to correct the unsafe act or condition before an actual loss occurs. Frequently “near-misses” (those occurrences that could have resulted in a loss but did not) play an important role in estimating future losses. Studies completed by the insurance industry have indicated that for every 300 near-misses that occur, 29 non-disabling injuries occur, followed by 1 fatality/serious injury. Therefore, it is the policy of the City of Green Bay to require all employees to report all near-misses to their supervisor to avoid future losses.

Near-misses are to be reported on a City of Green Bay *Near-Miss Reporting Form*.

## **SECTION 7                    EMPLOYEE TRAINING**

### **7.1      ALL EMPLOYEES**

All employees shall be trained on the contents of this safety manual as soon as is practical. The training shall be documented. The records shall be maintained for the duration of employment. Training documentation shall include at least the date, name of the trainer, topics covered and names and signatures of attendees.

### **7.2      NEW HIRES**

All new hires will be trained on the contents of this manual as soon as is practical after hire. The training shall be documented. The records shall be maintained for the duration of employment.

### **7.3      DEPARTMENT SPECIFIC TRAINING**

More elaborate and job specific training (in addition to this manual) may be required depending on the job function. Department specific training shall be conducted as needed for employees to safely perform their job functions (e.g., operating heavy equipment). Training documentation shall include at least the date, name of the trainer, topics covered and names and signatures of attendees

## **SECTION 8                    EMERGENCY PLAN**

### **8.1      FIRE EMERGENCY PROCEDURE**

1. Activate fire alarm
2. **DO NOT USE THE ELEVATORS**
3. If smoke becomes heavy, keep low.
4. After exiting the building using your designated evacuation route, move immediately to the designated assembly point depending on prevailing winds. Remember to stay upwind.
5. At assembly point, “roll call” will be taken to determine if any occupants/employees are unaccounted for. If someone is unaccounted for, the

Department Head, Supervisor or most senior employee present will report this information to the site Incident Commander (e.g., Fire Department).

Employees are to remain in the assembly area if safe to do so or until the “all clear” has been issued and announced.

## **8.2 MEDICAL EMERGENCY PROCEDURE**

In the event an employee or other occupant is in need of immediate emergency medical care the following procedure shall be followed:

1. Call Emergency Medical Services (EMS) – **911**
2. If so trained and qualified, administer First Aid/CPR and AED as required and/or wait until EMS arrives.
3. Report situation to your Supervisor and stay with the afflicted person until help arrives.
4. Contact the City Nurse - **448-3127**. Inform the City Nurse of the situation and location. If the nurse is not available, call Risk Management at **448-3125**.
5. Supervisor is to report situation to the Law Office if person injured was **not** an employee.

## **8.3 VIOLENT THREAT GENERAL PROCEDURE**

Overt threats of violence or terrorism must be taken seriously and investigated immediately. Any employee who is told or is informed of any potential threat must do the following:

1. Notify immediate Supervisor who may then relay to the Department Director.
2. If not already in communication with the Police, the Department Director, Supervisor, or their designee will notify the Green Bay Police Department by dialing **911** for **EMERGENCY** or **448-3201** for **NON-EMERGENCY**. Appropriate actions may then be determined by the Police Department based on information known at that time.
3. Facility may go on lockdown or be evacuated. **See Lockdown Levels/Evacuation Procedures.** (Ref. 8.5 page 19)

## **8.4 BOMB THREAT PROCEDURE**

### **SUPERVISORS**

1. Supervisor may then relay to the Department Director.
2. If not already in communication with the Police, Department Director, Supervisor, or their designee will notify the Green Bay Police Department by dialing **911** for **EMERGENCY** or **448-3201** for **NON-EMERGENCY**. Appropriate actions may then be determined by the Police Department and/or Risk Management based on information known at that time.

## STAFF

1. If you receive a bomb threat via the phone:
  - a. **DO NOT HANG UP THE PHONE**-the receiver will be replaced onto the phone after the call is traced.
  - b. Listen to what is said, background noises, etc. **and take notes.**
  - c. Notify Supervisor immediately.
2. If you find a suspicious object or note:
  - a. Do not touch or move the object.
  - b. Notify Supervisor immediately.
  - c. Turn OFF any transmission electronics such as cell phones or two-way radios.
3. If notified to check your area:
  - a. Search your workspace for any object that looks suspicious or any object that is not normally in your area.
  - b. Notify Supervisor immediately if anything suspicious is found.
4. You may be notified to evacuate in one of the following ways:
  - a. Through use of fire alarm.
  - b. Through the use of the formal Evacuation Process (see General Evacuation Procedure).

## 8.5 LOCKDOWN PROCEDURE

### **LEVEL 3-Minimum Security (Outside Doors Locked)**

Generally, a Level 3 lockdown will occur when a situation outside the building or within the community may impact the facility.

## SUPERVISORS

1. Supervisor may then relay to the Department Director.
2. If not already in communication with the Police, Department Director, Supervisor, or their designee may notify the Green Bay Police Department by dialing **911** for **EMERGENCY** or **448-3201** for **NON-EMERGENCY**. Appropriate actions may then be determined by the Police Department based on information known at that time.
3. Police Department will notify when all clear.

## STAFF

Staff must report a situation that may require a Lockdown to their Supervisor.

When notified of a Level 3 lockdown take the following steps:

1. Lock outside entry doors and remain in the offices.
2. Nobody is to leave or enter the building without police approval.
3. Notify your Supervisor.

### **Level 2-Partial Security (Office Doors Locked)**

Generally, a Level 2 lockdown will occur when a situation either outside or inside the building may impact the facility.

#### **SUPERVISORS**

1. Supervisor may then relay to the Department Director.
2. If not already in communication with the Police, Department Director, Supervisor, or their designee will notify the Green Bay Police Department by dialing **911** for **EMERGENCY** or **448-3201** for **NON-EMERGENCY**. Appropriate actions may then be determined by the Police Department based on information known at that time.
3. Police Department will notify when all clear.

#### **STAFF**

Staff must report a situation that may require a Lockdown to their Supervisor.

When notified of a Level 2 lockdown take the following steps:

1. Check hallways and meeting/conference rooms for employees or members of public. Bring any individuals into your office immediately.
2. If threat is **OUTSIDE** facility, lock outside entry doors. If threat is **INSIDE** facility outside entry doors should remain open.
3. Lock interior doors to main office area.
4. Notify your Supervisor.

### **Level 1-Maximum Security (Office Doors Locked-Employees in Secured Area)**

Generally, a Level 1 lockdown will occur when a situation threatens the safety of the employees or the public within the facility.

#### **SUPERVISORS**

1. Supervisor may then relay to the Department Director.
2. If not already in communication with the Police, Department Director, Supervisor, or their designee will notify the Green Bay Police Department by dialing **911** for **EMERGENCY**. Appropriate actions may then be determined by the Police Department based on information known at that time.
3. Police Department will notify when all clear.

## **STAFF**

Staff must report a situation that may require a Lockdown to their Supervisor.

When notified of a Level 1 lockdown take the following steps:

1. Check hallways and meeting/conference rooms for employees or members of public. Bring any individuals found into your office immediately.
2. Lock interior doors to main office area.
3. Turn off office lights.
4. Employees should move to an interior lockable office or other secure area (as available) and get out of sight.
5. No one is to leave the room or office until notified of all clear.
6. Do not peer out the window or office glass.

### **8.6 WORKPLACE SHOOTING/WEAPON PROCEDURE**

If not already in communication with the Police, call **911** for **EMERGENCY**.

Initiate Level 1 Lockdown. See Lockdown Levels/Procedures “Supervisors”-**Step #2**

### **8.7 VIOLENT/COMBATIVE PERSON PROCEDURE**

City employees are not expected to tolerate vulgar, threatening, physically intimidating behavior, or being physically threatened. If you feel a person has exceeded these boundaries these steps should be followed:

1. Immediately inform your Supervisor, if possible.
2. Ask individual to leave the premises.
3. If individual continues to refuse to leave, call **911**, if you are capable of doing so.
4. Wait for Police to arrive.
5. If situation escalates or becomes person becomes physically combative initiate a Lockdown. See Lockdown Levels/Procedures “Supervisors”-**Step #3**.

### **8.8 SEVERE WEATHER EMERGENCY PROCEDURE**

#### **AT HOME BASE / OFFICE**

1. All employees and occupants are to immediately file in a quick and orderly fashion to the **Designated safe place of refuge** using the stairwells.
2. Shelter will be taken in the **Designated safe place of refuge**.
3. Supervisors or most senior employee are to see their departments are secure by locking doors, removing currency, and closing vaults as time permits.

4. Supervisor or most senior employee will make a head count for their area. Supervisor will report to Department Head any unaccounted for employees.
5. Occupants will remain in the **Designated safe place of refuge** if safe to do so or until an “all clear” has been issued.

#### **FIELD PERSONNEL / DRIVERS (Transit, Laborers, Officers, Utilities, etc.)**

If an employee is on the road when severe weather is impending the following procedure will be followed:

1. If supervisor becomes aware of severe weather that may impact any en route employee the supervisor will radio any en route employee(s) to inform them of the situation.
2. Any issued watch and/or severe weather warning information will be relayed. If transporting passengers the watch/warning information will be communicated to them.
3. Depending on the situation, the driver may need to take shelter in event of severe weather or a tornado. **Do not try to outrun a tornado or stay in the vehicle.** Vehicles and buses can be tossed around easily in a tornado.
4. If a shelter cannot be reached in time: Exit the vehicle and lie flat on the ground in a low spot (e.g., gully, ditch, etc.) away from trees and other vehicles (do not get under your vehicle). Protect your head with arms or other object.
5. Communicate employee status to supervisor after severe weather has passed.

### **8.9 GENERAL EVACUATION PROCEDURE**

1. Move quickly to the exit assigned to your work area (keep right, single file stairwells).
2. **DO NOT USE THE ELEVATORS.**
3. Close your office door but do not lock it. **Close and lock any doors leading into your department.**
4. As you exit, Supervisors should quickly check conference rooms, restrooms, and other common areas (as time permits). Anyone located must be led to proper evacuation route.
5. After you exit the building, **move to designated assembly point** (unless told another location).

## **SECTION 9 GENERAL SAFETY RULES**

### **9.1 DRUG FREE WORKPLACE**

Employees are expected to report to work free from any substances that could inhibit their ability to perform their duties. The unlawful use, possession, distribution, dispensing or

manufacture of an illegal drug while on duty, on or off City property, is absolutely prohibited.

Failure to comply with this policy will lead to disciplinary action up to and including discharge.

**Prescription Drugs** City employees are to notify their supervisor when taking any medication which may interfere with the safe and effective performance of their duties or operation of City equipment.

## **9.2 SMOKING**

Smoking is prohibited in buildings, enclosed places in the vicinity of all flammables and where "NO SMOKING" signs are posted.

## **9.3 UNSAFE CONDITIONS AND EQUIPMENT**

All employees are required to report to their supervisor any unsafe working conditions, procedures or equipment. Employees shall be held accountable for damage to tools, equipment, vehicles, etc. that result from misuse, negligent operation, intentional damage, abuse or failing to report problems.

## **9.4 HORSEPLAY**

Practical joking or horseplay while on the job is strictly prohibited.

## **9.5 HOUSEKEEPING**

It is the responsibility of each employee to keep his/her work area neat and clean and to return all tools, equipment and material to the proper storage location.

All floors, aisles and work and storage spaces shall be kept clean and orderly. Any object that would present a trip/fall hazard, such as electrical cords, boxes, etc., shall be properly stored, secured, etc. Marked walkways shall be provided in storage areas and shall not be used for storage.

Any substance spilled or observed on the floor that would cause the floor to become slippery or create a trip hazard shall be cleaned up immediately. When floors become wet as a result of weather conditions or cleaning activity, "wet floor" signs shall be placed to warn employees and the public.

Oily and greasy rags shall be stored in an approved covered metal container provided for that purpose.

## **9.6 RADIOS**

If a radio is approved by your Supervisor the radio shall be of a type and played at a level that does not impair your hearing or your ability to hear those sounds around you which may be critical to your safety on the job.

## **9.7 MACHINE OPERATION**

An employee shall operate only the equipment or machinery they have been authorized and trained to operate safely. **Do not** adjust or repair machines or equipment unless authorized to do so.

Machinery or equipment shall **not** be operated with the guards removed.

Loose clothing, watches, rings and other jewelry shall not be worn when there is a danger of getting caught in the machinery or equipment.

## **9.8 COMPRESSED AIR**

Horseplay or use of compressed air for cleaning purposes on clothing and person is prohibited.

All air nozzles must meet OSHA use requirements.

## **9.9 COMPRESSED GAS CYLINDERS**

(Gas refers to physical state of substance; not necessarily gasoline.)

Refer to contents of gas cylinders by proper name.

Compressed gas cylinders, empty or full, shall be secured by a chain or metal strap in an upright position while stored, transported, or in use.

The valve protection cap shall be left on the cylinder at all times, except when the cylinder is in service.

Oxygen cylinders in storage shall be in a separate area away from combustible gases a minimum distance of 20 feet or by a noncombustible barrier at least 5 feet high having a fire-resistant rating of at least 1/2 hour.

Gauge testing devices using oil as a pressure medium shall not be used to test any gauge on oxygen or combustible gas systems.

Gas cylinders shall be handled in such a manner as to prevent them from dropping or striking each other.

Gas cylinders shall not be dragged or rolled horizontally.

Safety devices in valves shall not be tampered with.

Oil or grease shall not be used to lubricate any valves exposed to oxygen.

When cylinders are not in use, the valves should be shut off and hoses depressurized.

## **9.10 PROTECTING THE PUBLIC**

The public shall be kept away from all work areas that could expose them to a hazard.



## **9.11 FLOTATION DEVICES**

Coast Guard approved flotation devices shall be worn at all times while working over water or operating any type of watercraft.

## **9.12 DIGGER'S HOTLINE**

Before doing any excavating, digging, installing a sign or post or auguring a hole, the location of underground wires and utilities shall be determined by calling "Digger's Hotline" at **(800) 242-8511**. In situations where the work is being done on city property, all private utilities shall be located.

## **9.13 SLIPPERY CONDITIONS**

When weather (snow, rain, etc.) or water main breaks cause slippery conditions, to reduce the chance of falls, sand or salt will be used to improve traction in the work area where practical.

# **SECTION 10        AERIAL BUCKET USE**

## **10.1 SCOPE**

This section excludes the Green Bay Fire Department's Ladder trucks. Separate operating guidelines and practices are addressed through the Green Bay Fire Department's Standard Operating Guidelines.

## **10.2 CONDUCTING WORK**

All work shall be conducted as if the truck, boom, and aerial bucket were not electrically insulated.

## **10.3 AERIAL BUCKET OPERATOR**

Operators of aerial buckets shall exercise extreme caution when operating such devices in close proximity to energized lines or equipment.

## **10.4 BEFORE STARTING WORK**

Before starting work the operator shall ensure all ground level and bucket controls are in proper working order

## **10.5 MANEUVERING THE BUCKET**

When the boom must be maneuvered, the bucket operator shall always face in the direction in which the bucket is being moved.

## **10.6 WORK POSITION**

Work shall only be done while standing on the floor of the bucket.

## **10.7 ENTERING/LEAVING THE BUCKET**

Employees shall not enter or leave the bucket by walking on the boom.

## **10.8 AUTHORIZED AND TRAINED OPERATOR**

Only trained and authorized employees shall be allowed to operate the controls and be carried aloft in the aerial bucket.

## **10.9 WORK ZONE PROTECTION**

The vehicle's warning lights shall be used at all times while work is being done on road right-of-way. A work zone meeting the Manual on Uniform Traffic Control Devices (MUTCD) guidelines must be established when working in roadways and their right-of-ways.

## **10.10 TRAVEL**

No employee shall be transported any distance while in the bucket.

## **10.11 BODY HARNESS**

Employees in the bucket shall wear a full body harness at all times. The harness shall be attached to a lanyard which is connected to an anchor point.

## **10.12 SCISSORS LIFTS (MOBILE SCAFFOLDS)**

Lift casters and wheels shall be locked with positive wheel and/or wheel and swivel locks, or equivalent means to prevent movement of the scaffold while the lift is used in a stationary manner.

Manual force used to move the lift shall be applied as close to the base as practicable, but not more than 5 feet (1.5 m) above the supporting surface.

Power systems used to propel scissors lifts shall be designed for such use. Forklifts, trucks, similar motor vehicles or add-on motors shall not be used to propel lifts unless the lift is designed for such propulsion systems. Lifts shall be stabilized to prevent tipping during movement.

Employees shall not be allowed to ride on scissors lifts unless the following conditions exist:

1. The surface on which the lift is being moved is within 3 degrees of level, and free of pits, holes, and obstructions.
2. The height to base width ratio of the lift during movement is two to one or less.
3. Outrigger frames, when used, are installed on both sides of the lift.
4. When power systems are used, the propelling force is applied directly to the wheels, and does not produce a speed in excess of 1 foot per second.
5. No employee is on any part of the lift which extends outward beyond the wheels, casters or other supports.

**Before a scissors lift can be moved, each employee on the lift shall be made aware of the move.**

## **SECTION 11            ASBESTOS**

### **11.1    PURPOSE**

This information is intended to give employees a basic knowledge of the hazards associated with asbestos and methods that can be used to protect employees from exposure.

### **11.2    POLICY**

Employees are **not** allowed to perform asbestos-related work including abatement activity unless s/he has a valid certification card issued to them under Wis. Stat. 254.20(3). Remodeling and demolition projects regarding city owned buildings will be evaluated for the presence of asbestos. All removal or disturbance of asbestos-containing materials (ACM) shall be performed under controlled conditions by asbestos abatement workers appropriately trained and currently licensed by the Wisconsin Department of Health Services (DHS). Projects involving asbestos abatement shall comply with the requirements of Wis. Stat. 254.21 and the Code of Federal Regulations section 1926.1101.

### **11.3    ASBESTOS INVENTORY**

A written inventory of the type and location of asbestos-containing materials should be completed.

### **11.4    ASBESTOS IDENTIFICATION**

Asbestos is a mineral that comes apart into fibers. Asbestos is dangerous when it is in the air and you inhale it. It is very easy to get asbestos in the air. To work safely with asbestos, it must be kept out of the air. When asbestos gets into the air, the air must be filterer with special filters called HEPA filters. Asbestos is in more than 3,000 different products. In buildings, you may find asbestos in:

- Sprayed-on ceiling insulation
- Pipe and boiler insulation
- Duct insulation
- Floor and ceiling tiles

Asbestos is identified by tags, stickers, pipe labels, signs or other high visibility means. Labels or signs should contain the following information:

DANGER  
CONTAINS ASBESTOS FIBERS  
AVOID CREATING DUST  
CANCER AND LUNG DISEASE HAZARD

## 11.5 ASBESTOS DISTURBING ACTIVITIES

Examples of activities that may result in the disturbance of suspect asbestos-containing materials may include:

- Removing or repairing floor tile
- Removing or repairing ceiling tile
- Removing pipe insulation or pipe joint compound to access pipes
- Knocking holes in plaster ceilings or walls
- Removing carpet which has floor tile underneath it

## 11.6 OPERATIONS AND MAINTENANCE

Employees **shall not** remove or disturb any suspected asbestos-containing materials until the materials have been sampled by a appropriately trained and currently licensed asbestos inspector and it has been determined that it does not contain asbestos. ***NOTE: Employees shall not collect or handle samples of suspect asbestos-containing materials.***

## 11.7 COMMON LOCATIONS OF ASBESTOS CONTAINING MATERIALS

Pipe Insulation, Boiler Breech/Boiler Lagging, Boiler Door, Fire Proofing, Acoustical Ceiling Tile, Brake Pads & Linings, Floor Tile, Mastics & Glues, Roofing, Electrical Insulation, Putties, Caulks, Cements, Joint Compound and Siding

## 11.8 STRUCTURE OF ASBESTOS CONTAINING MATERIALS

Friable (crumbly) asbestos is more dangerous than non-friable (hard) asbestos. The only way to tell if something contains asbestos is to send it to a lab. A lab can test a piece of material, called a bulk sample. If you do not know if something is asbestos, call your supervisor and/or the City Safety Manager.

There are three common kinds of asbestos fibers:

- Chrysotile (95% of asbestos in buildings)
- Amosite (hard to wet)
- Crocidolite

Asbestos is something that deserves respect and needs to be worked with/around safely.

## 11.9 PRECAUTIONS

**Never:** Drill, hammer, cut, saw, break, damage, move, or disturb any asbestos-containing materials or suspected materials to help prevent it from becoming airborne.

## 11.10 NOTIFICATION

Whenever there is a project involving asbestos abatement, affected employee shall be notified of the project and the scope at least one working day prior to commencing the project. Notification will be given in an effort to allow employee to voice any concerns they may have regarding the project. Questions should be directed to the City Project Manager and/or the City Safety Manager.

## **SECTION 12**

## **BLOODBORNE PATHOGEN EXPOSURE CONTROL PLAN**

### **12.1 PURPOSE**

This written program has been developed for the protection of city employees and is in compliance with OSHA's Bloodborne Pathogen (BBP) standard (29 CFR 1910.1030). This plan informs the employee of the dangers concerning bloodborne pathogens and will explain precautions to prevent contact with blood and other potentially infectious material along with the procedure to follow in the event of an exposure.

### **12.2 SCOPE**

This program covers City of Green Bay employees defined to have reasonably anticipated exposure to blood or other potentially infectious material in the course of performing their job. A current list of job titles of employees that are reasonably anticipated to be exposed is available as an Appendix to this manual and in Human Resources.

Green Bay Police Department and Green Bay Fire Department have additional internal specific departmental procedures.

### **12.3 DEFINITION**

**Bloodborne Pathogens:** are microorganisms (viruses and bacteria) that are present in human blood and body fluids and can cause disease in humans. The three most common bloodborne pathogens are:

- Human Immunodeficiency Virus (HIV)
- Hepatitis B (HBV)
- Hepatitis C (HCV)

### **12.4 RESPONSIBILITIES**

#### **12.4.1 HUMAN RESOURCE DEPARTMENT-SAFETY AND HEALTH**

- Determine which jobs are reasonably anticipated to be exposed to blood or other potentially infectious materials in the course of performing their job.
- Maintain the written Bloodborne Pathogen Exposure Control Plan and review annually.
- Determine necessary equipment for employee protection.
- Ensure compliance of the program within City departments.
- Assist the departments in coordinating required training within the City through the guidance of the City's Occupational Health Nurse.
- Ensure appropriate follow-up is completed in the event there is an exposure.

#### **12.4.2 EMPLOYEES WITH REASONABLY ANTICIPATED EXPOSURE**

- Attend annual Bloodborne Pathogen training.
- Wear all required PPE when there is potential for exposure.
- Clean and disinfect all contaminated areas.

- Properly dispose of all contaminated items.
- Accept or decline the Hepatitis B vaccination.
- Follow the written Bloodborne Pathogen Exposure Control Plan.

#### **12.4.3 EMPLOYEES –GENERAL**

- Notify your supervisor whenever there is blood or other potential infectious materials that requires clean up.
- Avoid all contact with blood or other potentially infectious materials.

### **12.5 TRANSMISSION OF BLOODBORNE PATHOGENS-OCCUPATIONAL MEANS OF TRANSMISSION OF BLOODBORNE DISEASES**

#### **Non-Intact Skin**

Open sores, cuts, abrasions, acne or any sort of damaged skin (sunburn or blisters) are routes of entry for bloodborne pathogens. If human infected blood or other bodily fluids come in contact with non-intact skin disease transmission can occur.

#### **Parenteral**

Parenteral transmission of bloodborne diseases are caused by puncture wounds from needle sticks or sharp contaminated objects. If an object was injected with any type of blood related disease, the disease can be transmitted into another person's blood stream. It is for this reason personal protective equipment must be worn to reduce or eliminate the possibility of transmitting blood related diseases. In the case of sharp objects that may be contaminated with blood or any other body fluids, the objects must be picked up by mechanical means (scoop, tongs, broom/pan, etc.)

#### **Mucous Membrane**

Some areas of the face are considered open areas and must be protected depending on potential exposure situation. These areas include the mouth, eyes and nose. Protective goggles or a face shield must be worn to reduce or prevent the possibility of blood disease transmission.

Protective gloves must be worn when a city employee is administering first aid to an injured person who is bleeding.

### **12.6 PROTECTION**

#### **12.6.1 UNIVERSAL PRECAUTIONS**

Universal precautions will be observed by city employees with identified risk of exposure to prevent contact with blood or other potential infectious materials. All human blood will be considered infectious regardless of the perceived status of the sources.

#### **12.6.2 ENGINEERING AND WORK PRACTICE CONTROLS**

Engineering and work practice controls will be utilized to eliminate or minimize employee exposure. Where occupations exposure remains after institution of these

controls, personal protective equipment shall be utilized.

Specific engineering controls may include, but are not limited to, the following:

- Providing special containers for contaminated sharp instruments. The containers shall be inspected, emptied and maintained as necessary.
- In the event hand-washing facilities are not readily available, antiseptic cleaners shall be readily accessible.
- All equipment contaminated with blood or other potentially infectious material will be decontaminated prior to servicing or entering back into service.
- If decontamination is not feasible, a “biohazard” tag will be attached to the equipment with an explanation. The Occupational Health Nurse will be notified and will determine corrective actions.

### **12.6.3 ENVIRONMENTAL GUIDELINES**

- The worksite will be maintained in a clean and sanitary condition.
- Equipment and work surfaces will be cleaned and decontaminated after contact with blood or potentially infectious materials.
- Work surfaces will be decontaminated immediately or as soon as feasible with an approved disinfectant or with a mixture of one part bleach to ten parts water (1:10).
- All bins, pails and containers intended for reuse will be inspected as they are emptied for contamination with blood or other potentially infectious materials.
- Broken glassware is not to be picked up by hand. The glassware shall be picked up by using a brush and dustpan, tongs or forceps.

### **12.6.4 HAZARD COMMUNICATION–LABELS AND SIGNS**

- Warning labels will be attached to containers, refrigerators and freezers containing blood or other potentially infectious materials.
- Red bags or red containers should be used in conjunction with the warning labels.
- All employees will be trained to recognize the communication method of this hazard.

### **12.6.5 PERSONAL PROTECTIVE EQUIPMENT**

Personal protective equipment (PPE) will be provided at no cost to individuals who have risk of occupational exposure under the City of Green Bay employment. PPE may include but is not limited to gloves, gowns, face shields/masks, eye protection, CPR shields and resuscitation bags.

1. Individuals at risk for occupational exposure will use the appropriate PPE based on the anticipated exposure.
2. Appropriate PPE will be readily available in areas where there is potential for occupational exposure.
3. Individuals at risk for occupational exposure will be made aware of where the PPE is obtained in their area.

4. Employees will inform their Supervisor when PPE stock needs replacement.
5. PPE contaminated with blood or other potentially infectious materials will be removed as soon as feasible. All contaminated clothing must be placed in a red bag or designated container and sealed. If washable, refer to appropriate laundering and disposal procedures below.
6. All PPE will be removed prior to leaving the work area and appropriately discarded or stored.
7. Disposable PPE when saturated or caked with blood or body fluids will be placed in a red bag or designated trash container for regulated waste.
8. Employees should have a change of uniform or access to cover gowns/scrubs if clothing becomes contaminated. The Supervisor will attempt to find temporary clothing if necessary.

## GLOVES

Gloves will be worn when it can be reasonably anticipated that the employee may have hand contact with blood, other potentially infectious materials, mucous membranes, and non-intact skin and when handling contaminated, or potentially contaminated items.

Wash hands as soon as possible after removing gloves.

Disposable gloves such as surgical or examination gloves will be replaced as soon as practical when contaminated or as soon as feasible if they are torn, punctured, or when their ability to function as a barrier is compromised. Disposable gloves will not be washed or decontaminated for reuse.

Utility gloves will be decontaminated for reuse if the integrity of the gloves is not compromised. They must be discarded if they are cracked, peeling, torn, punctured, exhibit other signs of deterioration or when their ability to function as a barrier is compromised.

Latex free gloves will be made available to anyone that is suspect of having a latex allergy. Employees, who come in contact with clients that may have latex allergies, will wear latex free gloves.

## MASK, EYE PROTECTION, AND FACE SHIELDS

Masks in combination with eye protection devices, such as goggles or glasses with solid side shields, or chin-length face shields, will be worn whenever a splash, spray, spatter, or droplets of blood or other potentially infectious materials may be generated and eye, nose, or mouth contamination can be reasonably anticipated.

## GOWNS, APRONS, AND OTHER PROTECTIVE BODY CLOTHING

Appropriate protective clothing such as gowns, aprons, lab coats or similar outer garments will be worn in occupational exposure situations. The type and characteristics will depend upon the task and degree of exposure anticipated.

Surgical caps or hoods and/or shoe covers or boots will be worn in instances when gross contamination can reasonably be anticipated.



Remove as soon as feasible any garment contaminated by blood or other potential infectious materials in such a way as to avoid contact with the outer surface.

#### **12.6.6 HAND-WASHING FACILITIES/PRACTICES**

1. Antiseptic towelettes or hand sanitizer will be provided to an employee at risk of occupational exposure to be used when hand-washing facilities are not readily accessible. Hands shall be washed with soap and running water as soon as feasible.
2. Employees must wash their hands immediately or as soon as feasible after removal of gloves or other personal protective equipment.
3. Employees must wash their hands or any other skin with soap and water immediately or as soon as feasible following contact with blood or other potentially infectious materials.

#### **12.6.7 HEPATITIS B VACCINATION PROGRAM**

- The Hepatitis B Vaccine (HBV) is not mandatory
- HBV will be offered free of charge to all employees with “reasonably anticipated” risk of occupational exposure when performing their job duties.
- The HBV program is under the supervision of the Medical Director and administered by the Occupational Health Nurse.
- Prior to vaccination the employee will be provided with information on the HBV, its efficacy, safety and method of administration.
- The HBV will be made available within 10 working days of initial assignment to all employees who have risk of occupational exposure unless the employee has documentation of previously receiving the complete HBV series, verification of immune status, or if contraindicated for medical reasons.
- Current employees at risk who decline the HBV can, at any time, decide to accept the vaccine which will then be made available at that time by the employer free of charge to the employee.
- A Hepatitis B Vaccine Declination form will be signed by employee with occupational risk if he/she refuses the HBV.
- Vaccinations will be administered according to current recommendations of the Centers for Disease Control.
- The employer will maintain confidential record of the HBV administration for length of employment plus 30 years.

#### **12.6.8 EMPLOYEE TRAINING**

All employees with occupational exposure will be appropriately trained during work hours at no cost to the employee. The training will be conducted as follows:

- at the time of initial assignment and annually thereafter;
- additional training will be provided with modification or institution of new tasks, procedures, or devices which may affect occupational exposure;

Training will be in accordance with OSHA’s bloodborne pathogen standard. Appropriate training records will be kept for three years.

## **12.7 DISPOSAL AND HANDLING**

### **12.7.1 NEEDLES/SHARPS**

Contaminated needles and other contaminated sharps are not to be bent, sheared, broken, recapped or removed. Contaminated needles or sharps for disposal shall be discarded immediately or as soon as feasible in containers which are closeable, puncture resistant and leak-proof on the sides and bottom.

The containers shall be red and have the required red biohazard label on them. Contaminated needles, sharps or items being held for evidence will be placed in puncture resistant, closable, leak-proof containers.

### **12.7.2 CONTAMINATED SHARPS DISCARDING AND CONTAINMENT**

Any disposable sharps (e.g. broken glass needles, blades, etc.) contaminated with blood other potential infectious materials will be discarded immediately or as soon as feasible in a sharp container that is puncture and leak proof.

Sharps containers will be:

- Located in the area where sharps are used or reasonably anticipated to be found.
- Maintained in an upright position at all times.
- Replaced routinely and not allowed to overfill.

Sharps containers will be closed to prevent spillage or protrusion of contents prior to removal or replacement.

Sharps containers will be sealed prior to storage transport or shipping.

### **12.7.3 LINENS**

Linen is considered contaminated when soiled with blood or bodily fluids. Contaminated lined will be:

- Handled as little as possible with a minimum of agitation.
- Placed in a laundry bag at the location of use without sorting or rinsing
- Taken to a designated laundering facility.

### **12.7.4 WORK AREA GUIDELINES**

Eating, drinking, smoking applying cosmetics/lipbalm, or handling contact lenses is prohibited in work areas where there is a reasonable likelihood of exposure to blood or other potential infectious materials.

Food and drink is not to be kept in refrigerators, freezers, shelves, cabinets or on countertops or bench tops where blood or bodily substances are present.

All procedures shall be performed in such a manner as to minimize splashing, spraying, spattering or generation of droplets of blood or other potentially infectious materials.

### **12.7.5 REGULATED WASTE**

All waste saturated or caked with blood or other potentially infectious materials will be

discarded in a red biohazard bag.

All biohazard waste will be removed in sealed bags or containers. The bags must be discarded in a designated area. All departments, excluding Police and Fire, shall notify the city's Occupational Health Nurse for proper disposal.

All biohazard waste shall be disposed of in accordance with federal, state and local regulations.

#### **12.7.6 EQUIPMENT**

All equipment contaminated with blood/body substances will be decontaminated prior to servicing or shipping. If decontamination is not feasible, a "biohazard" tag will be attached to the equipment with an explanation of portions remaining contaminated.

### **12.8 POST EXPOSURE AND FOLLOW UP**

#### **POST-EXPOSURE EVALUATION AND FOLLOW-UP**

1. Any employee exposed to blood or other potential infectious materials will report the incident to their supervisor **immediately** or as soon as feasible. **Prompt reporting is essential because, in some cases, post exposure treatment may be recommended and it should be started as soon as possible.**
2. First-aid will be administered immediately or as soon as feasible post exposure.
  - a. If exposure is on non-intact skin, wash the area thoroughly with soap and warm water.
  - b. If exposure to eyes or mucous membranes, flush area with copious amounts of water for 15 minutes.
3. If exposure requires medical attention, the injury can be treated at a health care facility.
4. If the exposure occurs between the hours of 7AM - 3PM (M-F) contact the Occupational Health Nurse at 448-3127. A confidential medical exam and follow up will be immediately available to the exposed employee.
5. During "off" hours, proceed to the Emergency Room closest to you at the time of the incident. A determination of the significant exposure will be done by the attending physician. Baseline lab work and any necessary PEP (Post Exposure Prophylaxis) medication will be prescribed at that time if needed.
6. Identify the source person if possible. A health care professional will attempt to obtain consent and make arrangements to have the source individual tested as soon as possible to determine HIV, HBV and/or HCV infection.
7. **After hours, contact the Occupational Health Nurse at 448-3127 and inform s/he of the incident which occurred, leaving a message on the confidential voice mail. This will enhance the most efficient follow up for the injured employee.**
8. Counseling will be available to the employee during the waiting period. The City Occupational Health Nurse will assure what appropriate post exposure follow up and/or counseling will be made available. The exposed employee will be provided with the source individual's test results and with information about applicable disclosure laws and regulations concerning the identity and

infectious status of the source individual identity and infectious status of the source individual (e.g. laws protecting confidentiality).

## 12.9 RECORDKEEPING

1. Employee medical records related to occupational exposure will be kept for the length of employment plus 30 years. **This will be kept confidential.**
2. All exposures must be recorded as injuries on the OSHA Log.
3. Records on persons employed for less than one year, do not need to be maintained if the record is given to the employee on termination of employment.
4. A sharps injury log will be maintained by the Occupational Health Nurse, in such a manner to protect the confidentiality of the employee. The log will include the type of device, department and explanation of how the incident occurred.

## SECTION 13 CONFINED SPACE PROGRAM

### 13.1 PURPOSE

The purpose of this written program is to protect the health and safety of City of Green Bay employees who enter confined spaces and/or are assigned to serve as attendants or rescue personnel. This program establishes minimum requirements all affected City Departments must adhere to and is also intended to insure compliance with the requirements of OSHA 29 CFR §1910.146 and SPS 332.28 & 332.29.

### 13.2 SCOPE

This program covers all departments and employees who enter permit-required confined spaces (PRCS), the associated attendants, entry supervisors, emergency rescue operations, and program administrators. The program also outlines procedures for outside contractors entering confined spaces on behalf of the City.

### 13.3 DEFINITIONS

**Acceptable Entry Conditions** – conditions that must exist in a permit space to allow entry and to ensure that employees involved with a permit-required confined space can safely enter and perform work.

**Attendant** – a trained individual stationed outside one or more confined spaces who monitors the authorized entrants and who performs all attendant duties assigned herein.

**Confined Space** – a space that **(must meet all three conditions)**:

1. Is large enough and so configured that an employee can enter and perform work; **and**
2. Has limited or restricted means for entry or exit, such as a tank, vessel, silo, storage bin, hopper, vault, or pit; **and**
3. Is not designed for continuous employee occupancy.

**Entrant** – an employee who is authorized to enter a confined space.

**Engulfment** – the surrounding and effective capture of a person by a liquid or finely divided flowable solid substance that can be aspirated to cause death by filling or plugging the respiratory system or that can exert enough force on the body to cause death by strangulation, constriction or crushing.

**Entry** – the action by which a person passes through an opening into a confined space. Entry includes ensuing work activities in that space and is considered to have occurred as soon as any part of the entrant's body breaks the plane of an opening into the space.

**Entry Permit** – a written internal permit that identifies a confined space where work is to be completed and potential hazards that need to be evaluated and controlled before authorization is given for entry.

**Entry Supervisor** – person responsible for:

1. determining if acceptable conditions are present before entering a permit space;
2. authorizing entry;
3. coordinating and supervising all entry operations; and terminating entry.

**Hazardous Atmosphere** – an atmosphere that may expose employees to the risk of death, incapacitation, impairment of ability to self-rescue, injury or acute illness from one or more of the following causes:

1. Flammable gas, vapor or mist in excess of 10% of its lower explosive limit;
2. Airborne combustible dust at a concentration that meets or exceeds its lower explosive limit; or dust that obscures vision at 10 feet or less;
3. Atmospheric oxygen concentrations below 19.5% or above 23.5%;
4. Atmospheric concentrations of any substance listed in Subpart G, Occupational Health and Environmental Control, or in Subpart Z of 29 CFR 1910 substances for which a dose or permissible exposure limit is published and could result in employee exposure in excess of its dose or permissible exposure limit.

*NOTE: An atmospheric concentration of any substance that is not capable of causing death, incapacitation, impairment of ability to self-rescue, injury, or acute illness due to its health effects is not covered by this provision.*

5. Any other atmospheric condition that is immediately dangerous to life or health.

**Immediately Dangerous to Life or Health (IDLH)** – any condition that poses an immediate threat to life, a delayed threat to life, or would cause irreversible adverse health effects or that would interfere with an individual's ability to escape unaided from a confined space.

**Lower Explosive Limit (LEL)** – the lowest concentration of a gas or vapor, expressed in percent by volume in air, which burns or explodes if an ignition source is present at room temperature.

**Non-Permit Confined Space** – a confined space which does not contain or have the potential to contain an atmospheric hazard or any other serious safety or health hazard.

**Permissible Exposure Limit (PEL)** – exposure limits to protect workers against the health effects of exposure to hazardous substances. These limits are regulatory limits on the amount or concentration of a substance in the air. These limits are based on an 8-hour

time weighted average exposure.

**Permit-Required Confined Space** – a confined space that has one or more of the following characteristics:

1. Contains or has a reasonable potential for hazardous atmosphere.
2. Contains a material that has the potential for engulfment.
3. Is internally configured so an employee could become trapped or asphyxiated by inwardly converging walls or a floor that slopes downward into a smaller cross-section.
4. Contains any other recognized serious safety or health hazard.

**Rescue Personnel** – personnel designated to rescue employees from permit spaces.

**Retrieval System** – equipment used for a non-entry rescue of persons from permit spaces (i.e., tripod).

### 13.4 CLASSIFICATION OF CONFINED SPACES

#### **Permit-Required Confined Space**

A permit-required confined space is a confined space that has **one or more** of the following characteristics:

1. Contains or has potential to contain a hazardous atmosphere; **or**
2. Contains a material which has the potential for engulfment of an entrant; **or**
3. Has an internal configuration that could cause an authorized entrant to be trapped or asphyxiated by inwardly converging walls or by a floor which slopes downward and tapers to a smaller cross-section; **or**
4. Contains any other recognized serious safety or health hazard.

#### **Special Provision for the Green Bay Fire Department**

The Green Bay Fire Department (GBFD) may be required on occasion to respond to community and/or facility confined space related emergencies for internal (City) and external (other businesses) customers without the luxury of pre-assessment of a given space.

Given these circumstances and obligations of the GBFD, it is understood that if GBFD is involved in any confined space entry, a hazard is already imminently present necessitating the rescue and any entry made into a confined space will be treated and managed as if the space is **PERMIT-REQUIRED** in all cases.

#### **Permit- Required Confined Space Reclassification**

According to 29 CFR §1910.146 (c) (7), a permit required confined space may be “reclassified” as a non-permit required confined space if no actual or potential hazardous atmosphere exists and all other hazards can be “eliminated” without entry into the space. The space can remain a non-permit space as long as all the non-atmospheric hazards remain eliminated through non-entry and no new atmospheric hazards are introduced. If it is necessary to enter the confined space to eliminate hazards, such entry shall be performed under routine permit-required space protocol. It should be noted that control of atmospheric hazards through forced air ventilation does not constitute “elimination” of the hazards.

### **Alternate Entry Procedures**

According to 29 CFR §1910.146 (C) (5), alternate entry procedures may be used for otherwise permit-required confined spaces that meet **ALL** of the following criteria:

1. The **ONLY** hazard present in the permit space is an actual or potential hazardous atmosphere. **and**
2. Continuous forced air ventilation alone is sufficient to maintain that permit space safe for entry. **and**
3. The City has documented inspection and monitoring data supporting #1 and #2 above.

The following conditions/procedures must be met prior to and/or during entry using Alternate Entry Procedure Method (Entry Permit is NOT required):

1. When a space is entered, the portal shall be promptly guarded following removal of cover, hatch or other opening.
2. The internal atmosphere shall be tested, with a calibrated direct-reading instrument, for oxygen content, flammable gases and vapors and for potential toxic air contaminants, in that order.
3. The space shall be purged by forced air ventilation ensuring effective control and/or elimination of any potential/actual hazardous atmosphere to acceptable entry conditions;
4. The forced air ventilation shall be so directed as to ventilate the immediate areas where an employee is or will be present within the space and shall continue until all employees have left the space;
5. The air supply for the forced air ventilation shall be from a clean source and may not increase the hazards in the space.
6. The atmosphere within the space shall be periodically tested as necessary to ensure that the continuous forced air ventilation is preventing the accumulation of a hazardous atmosphere. Employees who enter the space shall be provided with an opportunity to observe the periodic testing required.
7. If a hazardous atmosphere is detected during entry:
  - Each employee shall leave the space immediately;
  - The space shall be evaluated to determine how the hazardous atmosphere developed; and
  - Measures shall be implemented to protect employees from the hazardous atmosphere before any subsequent entry takes place.

The City shall verify the space is safe for entry and pre-entry measures as outlined above have been taken, through a **written certification** containing the date, the location of the space and the signature of the person providing the certification. The certification shall be made before entry and shall be made available to each employee entering the space or to the employee's authorized representative.

### **Signage:**

The City Green Bay recognizes by being a municipal employer there are confined spaces present in the workplace. The Department Head or his/her designee shall therefore inform employees by posting legible signs at the entrances to the confined spaces. Signs are not however, required at manholes located in sewer systems or in public areas. To

inform employees, a sign should read “***DANGER – PERMIT REQUIRED CONFINED SPACE – DO NOT ENTER UNLESS AUTHORIZED***”, or other similar language. (Signs must conform to the requirements in OSHA 29 CFR §1910.146).

### **13.5 AIR MONITORING**

No person may enter a confined space until the atmosphere of the confined space is sampled and air quality is determined for all levels/strata in all areas of the confined space. Appropriate calibrated sampling devices shall be used to sample the atmosphere of a confined space. When entry into a confined space is by means of a manhole, a probe shall be inserted through a pick-hole of the manhole cover, or the manhole cover shall be pried open on the downwind side to allow just enough room for the insertion of the device.

The atmosphere of each confined space shall be sampled for:

1. Oxygen
2. Hydrogen sulfide or carbon monoxide, depending on the hazard present;
3. Flammable/Combustible gases; and
4. Any other hazardous substance which an employee may work with or be exposed to or has reason to believe may be present as evidenced by past experience or by its configuration or confined space properties.

**Note:** Authorized entrants and/or their authorized representatives shall be provided an opportunity to observe the atmospheric testing of the confined space that is conducted prior to entry and subsequent testing.

#### **Sampling Device:**

The sampling device shall have a direct readout, which can simultaneously test for 1-3 listed above, without manual switching. The sampling device shall be equipped with audible and visible warning devices, which indicate when an atmosphere of a confined space has:

1. An oxygen content of less than 19.5% or more than 23.5%;
2. A hydrogen sulfide content of 10 parts per million (ppm) or more, or a carbon monoxide content of 35 ppm or more;
3. A flammable/combustible gas content of 10% or more of the lower explosive limit (LEL).

The sampling device used in confined spaces shall be intrinsically safe for use in potentially explosive atmospheres.

#### **Calibration:**

The sampling device shall be calibrated relative to the oxygen content of the ambient air at the time of sampling. Calibration of the sampling device relative to the oxygen content shall be performed where the 20.9% natural content of oxygen in the air is most likely to occur. This prohibits oxygen calibration near a confined space opening. If the sampling device has a zero set it shall be zeroed in a clean atmosphere.

Calibration of the sampling device by the introduction of a known concentration standard shall be conducted as often as recommended by the manufacturer, or at least every six months. Bump testing or exciting the sensors with gas shall not be a substitute for calibration.



## 13.6 ENTRY PROCEDURES

No employee may enter or work in a confined space, unless the entry or work is in compliance with the provisions of this program. Due to the hazardous nature of permit-required confined spaces, the Department Head or his/her designee shall carefully monitor and control such activities performed by their employees.

### **Permit-Required Confined Space Entry Conditions**

1. Prior to entry of a Permit-Required Confined Space, the Entry Supervisor must complete and post the *Confined Space Entry Permit*. This includes pre-entry atmospheric monitoring.
2. Employees completing the entry permit and determining if acceptable entry conditions are present will be designated as the "Entry Supervisor" and have duties of authorizing entry, overseeing entry and terminating entry.

*Note: An entry supervisor may serve as the attendant or as the entrant, as long as this person is trained in accordance with the Confined Space program and is equipped as required for the role. In addition, the duties of the entry supervisor may be passed from one qualified individual to another during the course of an entry.*

3. Continuous monitoring of the atmosphere within the authorized entrant's immediate area shall be completed and recorded while in the confined space.
4. Continuous air ventilation must be tested, set-up and ready for fresh-air supply at all times during the entry. Fresh air ventilation must be used whenever a hazardous atmosphere is suspected or found and the space sufficiently purged prior to entry.
5. **NO EMPLOYEE** may enter the Permit-Required Confined Space without at least one (1) attendant stationed at the entrance of the confined space. A flagman who is directing traffic cannot serve as the attendant. The attendant shall remain stationed outside the confined space for the duration of the entry.
6. Each entrant entering a permit-required confined space will have an appropriate retrieval line attached to a full body harness. The other end of the line must be secured to an appropriate mechanical lifting device (e.g., tripod) outside the entry portal to facilitate **NON-ENTRY** rescue. A retrieval line is not required if:
  - A confined space has obstructions or turns that would prevent pull on the retrieval line from being transmitted to the entrant; or
  - A confined space from which an employee being rescued with the retrieval system has projections which would severely injure the employee if forcefully removed; or
  - A confined space when entered by an entrant using an air supplied respirator and retrieval lines could pose an entanglement hazard.

***\*In these cases other means of entrant retrieval and/or rescue procedures must be defined and prior to entry.***

7. Any authorized entrant who makes horizontal movement into a confined space or who descends in such a manner as to make a mechanical retrieval device useless for a rescue attempt shall still wear a full body harness.

8. All employees within the confined space and those employees assigned to serve as attendants shall be in constant two-way communication.
9. Smoking is prohibited within the confined space or within a 10 feet radius of the entrance of a confined space.
10. All employees shall comply with the requirements and limitations on the confined space entry permit, including the maximum number of employees permitted to work in the confined space.
11. All hazards (e.g., unexpected start-up, atmospheric, thermal, mechanical, engulfment, etc.) in the confined space are eliminated or controlled via engineering controls, lockout/tagout, ventilation, or some other means.
12. Authorized entrants are protected by use of appropriate personal protective equipment (PPE) against any remaining hazards that were unable to be eliminated; and all procedures of this program are being followed.
13. Appropriate entry equipment including atmospheric testing equipment is readily available for use and is used.
14. The confined space shall be appropriately isolated from other work activity by means of signs and barriers as necessary.
15. The confined space shall be purged, made inert, flushed, cooled, or ventilated with appropriate equipment as necessary to eliminate or control atmospheric hazards.
16. Pedestrian, vehicle, or other barriers shall be provided as necessary to protect entrants from external hazards.
17. At least one attendant shall be provided outside the space into which entry is authorized for the duration of entry operations.
18. Conditions in the confined space must remain acceptable for entry throughout the duration of the entry.
19. If welding, cutting, brazing or other burning operations are to take place a ***Hot Work Permit*** must be completed.
20. Emergency services will be available throughout the duration of entry.

## **13.7 DUTIES AND RESPONSIBILITIES**

### **Duties of Entry Supervisor**

1. Knows the hazards that may be encountered during entry and informs the entrants about the hazards, including information on the mode, signs, or symptoms and consequences of exposure.
2. Verifies the proper atmospheric tests have been conducted and that all procedures and equipment are in place before signing the Entry Permit.
3. Assures the Entry Permit is completed prior to each entry.
4. Terminates the entry and cancels the permit when needed.

5. Verifies rescue personnel are available and the means for summoning them or other emergency personnel is available and operable in the event that an emergency occurs.
6. Removes unauthorized individuals who have entered or who attempt to enter the confined space.
7. Determines when responsibility for a permit space entry operation is transferred entry operations remain consistent with terms of the entry permit.
8. Submits completed entry permits, and equipment calibration records.
9. Provides employees an opportunity to observe the atmospheric testing of the confined space.

***NOTE: The Entry Supervisor may also serve as an attendant or as an authorized entrant provided they are properly trained and equipped. The duties of the Entry Supervisor may also be passed from one individual to another during the course of an entry operation.***

#### **Duties of Authorized Entrants**

Each Department Head or his/her designee shall ensure that each authorized entrant:

1. Knows the hazards that may be faced during entry, including information on the mode, signs or symptoms, and consequences of the exposure;
2. Knows how to properly use equipment;
3. Communicates with the attendant as necessary to enable the attendant to monitor entrant status and enable the attendant to alert entrants of the need to evacuate the space;
4. Be able to alert the attendant whenever the entrant recognizes any warning sign or symptom or exposure to a dangerous situation; or a prohibited condition;
5. Be able to exit the space whenever;
  - a. an order to evacuate is given by the attendant or the entry supervisor; or
  - b. whenever the entrant detects a prohibited condition/dangerous situation; or
  - c. when an evacuation alarm is activated.
6. Follows conditions and limitations dictated on the entry permit.

#### **Duties of Authorized Attendants**

The Department Head or his/her designee shall ensure each authorized attendant:

1. Knows the hazards which may be faced during entry, including information on the mode, signs or symptoms, and consequences of the exposure;
2. Is aware of the possible behavioral effects of hazard exposure to entrants;
3. Continuously maintains an accurate count of authorized entrants in the confined space and ensures the means used to identify authorized entrants accurately identifies who is in the space;

4. Remains outside the confined space during entry operations.
5. Communicates with authorized entrants as necessary to monitor entrant status and alerts entrants of the need to evacuate the confined space;
6. Monitors activities inside and outside the space to determine if it is safe for authorized entrants to remain in the space and orders the authorized entrants to evacuate the space immediately under the following conditions:
  - a. If the attendant detects a prohibited condition;
  - b. If the attendant detects the behavioral effects of hazard exposure in an authorized entrant;
  - c. If the attendant detects a situation outside the space that could endanger the authorized entrant;
  - d. If the attendant cannot effectively and safely perform all the duties required.
7. Summons rescue and other emergency services as soon as the attendant determines authorized entrants need assistance to escape from the confined space hazards.
8. Facilitates non-entry rescue when required.
9. Warns unauthorized personnel they must stay away from the confined space.
10. Advises unauthorized personnel they must exit the confined space immediately if they have entered the confined space.
11. Informs the authorized entrant(s) and the entry supervisor, if applicable, if unauthorized persons have entered the confined space.
12. Does not perform duties which may interfere with the attendant's primary duty of monitoring and protecting the authorized entrants.
13. Follows conditions and limitations dictated on the entry permit.

### **Contractors**

When the City of Green Bay engages the services of another employer or agency to have their employees perform work that involves confined space entry, the Department Head or his/her designee shall assure that:

1. The other employer or agency is apprised of the elements, including the hazards identified with the space.
2. Entry operations are coordinated and agreed to with the other employer or agency when employees of both will be working together in or near confined spaces. Confined Space Entry Programs are to be exchanged and discussed.
3. An agreed permit-required confined space entry protocol based on each program will be discussed and agreed to well prior to entry.
4. The City Safety Manager will be notified by the City Department assisting in the coordination of the entry at least **30 days** in advance or as soon as possible in the case of an emergency.

## 13.8 TRAFFIC SAFETY

Entrances to confined spaces that are located in streets shall be guarded in accordance with the following requirements:

1. Employees shall activate the following warning lights upon approach to an entrance to a confined space:
  - a. Vehicle's beacon light
  - b. one-way hazard flashers
2. Employees shall park the vehicle used to transport their confined space equipment in such a way that the vehicle does not obstruct the normal traffic flow and shall, when possible, use the vehicle to provide protection for the employees.
3. Employees shall park the vehicle in such a manner as the vehicle's exhaust cannot accumulate in the confined space.
4. Employees shall properly place traffic cones around the manhole and any vehicle in accordance with state and federal traffic ordinances to adequately warn oncoming traffic.
5. Traffic safety cones shall be visible to traffic in all directions and in such a manner as to protect the employees from the traffic flow. Traffic cones should also be placed far enough from the confined space to give drivers adequate notice.
6. When working on the street or an easement surface, all standby, flag person, and entry employees shall at all times wear an ANSI-approved traffic safety vest or the equivalent. A flag person(s) shall be added to the confined space entry team when the need arises. The flag person(s) shall not be considered as the required attendant for a permit required confined space.
7. A railing, temporary cover or barrier that will prevent an accidental fall through the opening and will protect the employee working in the space from foreign objects entering the space shall promptly guard the space opening.

## 13.9 RESCUE AND EMERGENCY SERVICES

The City of Green Bay has taken precautions to assure safety in confined space entries by the use of self-rescue and non-entry rescue. Even with the most prudent pre-planning, employee training, and the best safety procedures in place, there may be times when an entry rescue is needed. The following procedures are established for affecting an entry rescue.

### **Entry Rescue**

The **City of Green Bay Fire Department** (GBFD) is the primary rescue response agency and Emergency Medical Services designee for any confined space **entry rescue** for the City of Green Bay. As the designated rescue response agency for the City of Green Bay, the GBFD shall ensure personnel are provided with and are trained to properly use the personal protective equipment and the specialized rescue equipment for making a rescue into permit-required confined spaces. In addition, the GBFD will also ensure the following:

1. Make practice confined space entries at least once every **12 months** by means of simulated rescue operations in which they remove dummies, manikins, or actual persons from actual confined spaces.
2. Are trained and certified in first aid and CPR.
3. Have complete access to all confined spaces from which the rescue may be necessary so that the GBFD can develop the rescue pre-plan and practice rescue operations.

### **Protocol for Designated GBFD Rescue Services**

1. **Prior to entry (and with as much notice as possible)** into any permit-required confined space, the City Department performing the entry shall call the East Side Battalion Chief to inform them of a Confined Space Entry on the East Side of River. If the Confined Space entry is on the West Side of the River the City Department performing the entry shall call the West Side Battalion Chief. If there is no response, the City Department shall leave a message.
2. Identify yourself and your department to the Battalion Chief. Inform the Battalion Chief of the date, time, location, type of space to be entered, work to be completed and estimated duration of entry. The Battalion Chief will inform you if the Fire Department will send standby rescue crew for the entry.

### **Non-Entry Rescue**

To facilitate non-entry rescue, retrieval systems or similar methods shall be used whenever an authorized entrant enters a confined space, unless the retrieval equipment would increase overall risk of entry or would not contribute to the rescue of the entrant as previously outlined in section **In addition, an appropriate fall harness will be worn by all entrants during all permit-required, reclassified, and/or alternate type entries.**

### **Material Safety Data Sheets (MSDS)**

MSDSs will be maintained onsite (at the entry) for all known hazardous chemicals to be used in the confined space.

## **13.10 TRAINING**

Each Department Head or their designee is responsible to ensure employees have an active role in entry operations and are trained in order for attendants, authorized entrants and the entry supervisor(s) to work safely in and around the confined space and can assist in rescue operations. Training shall be provided to each employee having active roles in entry operations in accordance with the following:

1. Before the employee is first assigned duties;
2. Before there is a change in duties;
3. Whenever there is a change in confined spaces which presents a hazard about which an employee has not previously been trained;
4. Whenever the Department Head or his/her designee has reason to believe either there are deviations from entry procedures required or there are inadequacies in the employee's knowledge or use of these procedures.

The training shall establish employee proficiency in the duties required by this program

and shall introduce new or revised procedures, as necessary, for compliance with this program.

### **Certification**

All training to employees having active roles in entry operations shall be certified. The certification shall contain each employee's name, the signature of the trainer(s), training content, and the dates of the training. The certification shall be available for inspection by employees and their authorized representatives.

### **Equipment**

Each Department engaged in confined space entry must provide, maintain, and ensure proper use of testing, monitoring, communication, personal protective and rescue equipment. All PPE required for safe confined space entry is provided by the City of Green Bay and shall be worn/used by authorized entrants as applicable. When work at confined spaces is located in or on streets the employee shall follow traffic control and safety as outlined in the Manual Uniform Traffic Control Devices (MUTCD) Manual.

The following is a sample of minimum required equipment:

- 4 (four) gas monitor
- Two-way radio communications
- Eye and face protection
- Head protection
- Hearing protection
- Body protection
- Hand protection
- Respiratory protection
- Ventilation/blower systems
- Rescue equipment; full body harness, mechanical retrieval system with fall arrest capabilities and life lines
- Tripod or appropriate anchor point

## **13.11 RECORDKEEPING**

Under this program the following records are to be retained in accordance with the following:

1. Cancelled Entry Permits and Certifications for at least **one year**.
2. Documents for inspection, repair, and calibration results of all monitoring equipment for at least **5 years**.
3. Medical evaluation and surveillance records for the length of the employee's employment plus **5 years**.
4. Documents for inspection and maintenance of all retrieval systems, ropes, harnesses and other entry equipment for at least **5 years**.

## **SECTION 14                    ELECTRICAL WORK**

### **14.1 GENERAL**

All electrical work shall be in compliance with the most recent edition of the National Electric Code (NEC) and SPS 316. Only trained and qualified employees shall do

electrical work.

#### **14.2 WORKING “LIVE”**

Electrical equipment and lines shall always be considered to be “live” unless they are positively known to be de-energized and are grounded. Working on live equipment shall be limited to the extent possible. **When live work must be conducted, as in the case of troubleshooting, NFPA 70E protocol/procedures and associated PPE shall be worn.**

#### **14.3 ENERGIZED EQUIPMENT**

Energized equipment or wires shall never be left unguarded.

#### **14.4 LOCKOUT/TAGOUT**

All employees must follow the City of Green Bay Lockout/Tagout Policy.

### **SECTION 15        EXCAVATING AND TRENCHING**

#### **15.1 PURPOSE**

To outline safe practices and guidelines for the protection of Green Bay employees working in and around excavations and trenches.

To comply with the Wisconsin Department of Safety and Professional Services Administrative Code Chapter SPS 332.15, 332.38, 332.39 and the State of Wisconsin adopted Occupational Safety and Health (OSHA) construction Standard 29 CFR 1926.650, Excavations.

#### **15.2 RESPONSIBILITIES**

##### **15.2.1        DEPARTMENT HEADS**

Department Heads shall be responsible for:

1. Ensuring that appropriate equipment and safety equipment are provided to employees involved in trenching and excavation operations.
2. Ensuring that applicable training has been provided to affected employees.

##### **15.2.2        SUPERVISORS**

Supervisors shall be responsible for:

1. Ensuring that all affected employees have received the appropriate training and safety equipment they need to protect themselves.
2. Ensuring at least one competent person is on-site at all times.
3. Enforcing the safe practices outlined in the adopted trenching and excavation safety policy.

##### **15.2.3        COMPETENT PERSON**

Competent Person shall be responsible for:



1. Applying the proper training and equipment to safely work in trenches and excavations.
2. Ensuring that all hazards have been identified.
3. Complying with safe practices established in the adopted trenching and excavation safety policy.
4. Taking prompt corrective measures to eliminate any hazardous or dangerous conditions.
5. Completing the ***Trenching - Competent Person Checklist Form***

### 15.3 DEFINITIONS

**Benching** - means a method of protecting employees from cave-ins by excavating the sides of an excavation to form one or a series of horizontal levels or steps, usually with vertical or near-vertical surfaces between levels.

**Cave-in** - means the separation of a mass of soil or rock material from the side of an excavation, or the loss of soil from under a trench shield or support system, and its sudden movement into the excavation, either by falling or sliding, in sufficient quantity so that it could entrap, bury, or otherwise injure or immobilize a person.

**Competent Person** - means someone who is capable of identifying existing and potential hazards in the surroundings, or working conditions that are unsanitary, hazardous, or dangerous to employees, and who has authorization to take prompt corrective measures to eliminate them.

**Excavation** - means any man-made cut, cavity, trench, or depression in an earth surface, formed by earth removal which is greater than or equal to 5' in depth (or with a potential for collapse), and the width is not greater than 15' (measured at the bottom).

**Sheeting** - means the members of a shoring system which retain the earth in position and in turn are supported by other members of the shoring system.

**Shield (Shield System)** - means a structure able to withstand the forces imposed on it by a cave-in and thereby protect employees within the structure. Shields can be a permanent structure or can be designed to be portable and moved along as work progresses. Shields used in trenches are usually referred to as a "trench box" or "trench shield".

**Shoring (Shoring System)** - means an engineered support system constructed of timber or is mechanical system approved for shoring. Mechanical systems can include aluminum hydraulic, screw jack, or pneumatic shoring equipment. Shoring systems consist of uprights, cross braces, wales, struts and sheeting designed to support the sidewalls of an excavation and prevent cave-ins when sloping is impractical.

**Sloping (Sloping System)** - means a method of protecting employees from cave-ins by excavating to form sides of an excavation which are inclined away from the excavation as to prevent cave-ins. The angle of incline varies with differences in such factors as the soil type, environmental conditions of exposure and application of surcharge loads.

**Soil Type** - Soils are characterized by their physical properties and typed A, B, or C.

**Tabulated Data** - means tables and charts approved by a registered professional engineer and used to design and construct a protective system.

**Uprights** - means the vertical members of a trench shoring system placed in contact with earth and usually positioned so individual members do not contact each other. Uprights

are placed so individual members are closely spaced, in contact with or interconnected to each other and are often called “sheeting.”

**Wales** - are horizontal members of shoring system placed in the direction of the excavation face whose sides bear against the vertical members of the shoring system or earth (the uprights or sheeting).

#### 15.4 SOIL TYPES

Type A	Cohesive soils with an unconfined compressive strength of 1.5 tons per square foot (tsf) or greater (i.e. clay)
Type B	Cohesive soils with an unconfined compressive strength of greater than .05 tsf but less than 1.5 tsf (i.e. silt, sandy loam)
Type C	Cohesive soil with an unconfined compressive strength of .05 tsf or less (i.e. granular soils including gravel, sand and loamy sand, submerged soil or dense, heavy unstable rock, and soil from which water is freely seeping). <b><i>NOTE: This includes previously disturbed soils which are routinely found when working in areas such as: roadways, sidewalks, terraces, and easements.</i></b>

**IMPORTANT POLICY NOTE:** Although each soil condition carries its own requirements for providing protective systems, it shall be the policy of Green Bay to take consider ALL soils “**TYPE C**” soils and use a protective system to maximize protection for employees during trenching and excavation operations.

#### 15.5 SAFE OPERATIONAL PRACTICES

All Green Bay employees shall comply with the following safe practices prior to and during entry of a trench or excavation to ensure employee safety.

1. A designated competent person shall conduct trench, protective system and adjacent area inspections:
  - Daily and prior to the start of work and as needed throughout the shift.
  - As dictated by the work being done in the trench.
  - After every rainstorm.
  - After other events which could increase hazards, such as snowstorms, windstorms, thaw, earthquakes and dramatic change in weather.
  - When fissures, tension cracks, sloughing, undercutting, water seepage, bulging at the bottom, or other similar conditions occur.
  - When there is a change in the size, location or placement of the spoil pile.
  - When there is any indication of change or movement in adjacent structures.
2. Employees exposed to hazardous trench or excavation conditions are to be removed from these areas until precautions have been made and the area has been inspected by the competent person.
3. A ***Trenching – Competent Person Checklist Form*** shall be filled out for each inspection by a competent person for all excavations 5 feet or greater in depth.

4. Underground utilities must be located and marked before excavations begin. Utility installations must be protected, supported, or removed to protect employees.
5. Trenches **4 feet or more in depth** shall have a means of egress (i.e., ladder, ramp).
6. A ladder must be appropriately secured and extend a **minimum of 3 feet above** the top of the protective system or top grade of trench.
7. Ladders or other means of egress must be so located so that an employee does not have to travel more than **25 feet laterally** to the nearest means of egress.
8. Employees exposed to vehicular traffic on highways, roads, streets or their easements shall be provided and required to wear reflective vests or other suitable garments marked with or made of reflective or high visibility materials which meet the current ANSI/ISEA 107-2004 standard.
9. Traffic control devices and flag persons shall be used to warn traffic and create a safe work zone in accordance with current MUTCD guidelines.
10. Warning lights and 4-way flashers on all vehicles and heavy equipment shall be used on highways, roads, streets or their easements to enhance visibility.
11. Employees are not allowed to work under raised loads.
12. Employees are not allowed to work directly under loads being lifted or moved by heavy equipment used for digging or lifting. Employees must also stand far enough away from any vehicle being loaded or unloaded to prevent being struck by any spillage or falling materials.
13. Operators and/or drivers may remain in their equipment or vehicle cab compartments during loading and unloading operations if the compartments meet the current safety design standards. ( Reference: 29 CFR 1926.601 (b)(6) and Federal DOT Regulations)
14. The following steps must be taken to prevent vehicles from accidentally falling into an open trench or excavation: use of barricades where practical, use of stop logs where practical or have another employee use hand signals.
15. Employees may not work in any trench or excavation **over 4 feet in depth** without another employee present at the top of the trench or excavation. The top person must be someone other than the equipment operator when the person in the trench is not in the operator's constant view.
16. Trench or excavation openings must be adequately barricaded by using, at a minimum, fencing and/or flashing barricades on all sides when work is not in progress. Public thoroughfares, common paths, or sidewalks shall be barricaded a **minimum of 10 feet** from the excavation site. Any trench or excavation **greater than 4 feet deep** that is to be left unattended for greater than 24 hours, or is subject to water retention, must be fenced to a height of at least 4 feet using appropriate fencing materials.

17. Employees working on trench or excavation job sites must wear ANSI approved hard hats and safety glasses due to the inherent struck-by and falling debris hazards.
18. Employees shall not be permitted to enter, or work in, a trench or excavation **greater than 4 feet in depth** if a hazardous or toxic atmosphere is suspected or exists (i.e., oxygen deficiency, combustible gas concentration greater than 10% of the lower flammable limit, and hazardous substance concentrations).
19. Atmospheric testing must be conducted prior to and during entry if there is a trench or excavation **greater than 4 feet in depth**.
20. If water accumulation occurs in the trench, employees must protect the trench from cave-in with special systems or remove the accumulated water with equipment monitored by the competent person.
21. If the nature of work interrupts the natural drainage flow of surface water, a measure must be used to prevent surface water from entering the excavation and to provide drainage to an area adjacent to the trench and excavation.
22. Sidewalks, pavement sections, and curb lines shall not be undermined unless a support system or another method of protection is provided to protect employees from their possible collapse.
23. Spoil piles, equipment, or other materials shall be **no closer than 2 feet** from the surface edge of the trench which is measured from the nearest base of the spoil or equipment to the cut. *NOTE: Where more surface space is possible, the distance should be increased to ½ of the trench's depth from the cut edge.*
24. Spoil piles, equipment, or other materials should be placed so these items cannot accidentally run, slide, or fall back into the trench or excavation opening.
25. Spoil piles, equipment, or other materials should be placed to channel rainwater and other run-off water away from the trench or excavation opening.

## 15.6 PROTECTIVE SYSTEM REQUIREMENTS

There are three acceptable methods for providing protection in trench and excavation work. All trenches and excavations **greater than 5 feet in depth or those less than 5 feet, if the soil is unstable**, shall be properly protected using a recognized sloping, shielding and shoring method. Any trench or excavation that is **20 feet deep or greater** must have a protective system that has been designed by a registered professional engineer.

The following requirements are to be followed regardless of which method is to be utilized:

### Sloping and Benching Guidelines

- **SLOPING** – The slopping of the sides of the trench or excavation must be inclined away from the trench or excavation at an angle of 1.5 feet wide for every 1 foot in depth.

- **BENCHING** – The benching of the sides of the trench or excavation must be inclined away from the trench or excavation and benched with 4 feet horizontal and 2.5 feet vertical steps to the surface of the excavation. **Benching is not allowed in Type C soils.**

### **Shielding Guidelines**

- Only employees and egress ladders are allowed within the shielded area.
- Employees must enter and leave the shield in a protected manner by using a ladder or ramp.
- Employees must stay within the trench shield.
- Employees may not remain in a shield when it's being moved.
- A copy of the manufacturer's tabulated data must be present and accessible on the job site.
- Shields are to be maintained and used according to the manufacturer's general requirements and tabulated data.
- Shield equipment modifications must be approved by the manufacturer.
- Multiple shields must be connected using the appropriate locking devices.
- A trench box or trench shield must be set so that its top edge minimally reaches the top level of the excavation, or extends slightly above grade to prevent materials from rolling into the trench opening. A trench box or trench shield must be set within 2 feet of the trench bottom. Where the top of the trench box or trench shield is below grade, it must extend a minimum of 18 inches above the vertical part of the trench wall. The Manufacturer's Tabulated Data shall be reviewed to ensure proper installation methods are followed.
- Space between the shield and trench wall should be as small as possible. Spaces should be backfilled to prevent lateral movement of the box.
- Backfilling is to occur immediately following the removal of the shield system.

### **Shoring Guidelines**

- Shoring equipment is to be maintained and used according to manufacturer's general requirements and tabulated data.
- A copy of the manufacturer's tabulated data must be present and accessible on the job site.
- Any modifications must be approved by the manufacturer.
- Damaged shoring equipment must be examined by a competent person before using.
- Backfilling is to occur immediately following the removal of shoring systems.
- Shoring equipment must be installed starting from the top of the excavation working downward to the bottom.
- Shoring equipment must be removed starting from the bottom working upward to the top.
- Employee(s) shall never be lower than waist deep to the lowest cross brace while installing or removing shore equipment.
- Hydraulic shoring systems must be checked at least once during the shift (looking for leaking hoses, leaking cylinders, bent bases, etc.).
- Shoring uprights must **extend at least 2 inches above** the trench edge, and must extend all the way to the trench bottom.

- Shoring uprights must be placed **no greater than 4 feet apart** unless stipulated differently by the manufacturer's general requirements and tabulated data.
- Cross braces must be placed **no greater than 4 feet apart** unless stipulated differently by the manufacturer's general requirements and tabulated data.
- Cross braces must be placed **no less than 2 feet** from top of trench edge unless stipulated differently by the manufacturer's general requirements and tabulated data.
- Cross braces are placed **no less than 2.5 feet** from bottom of trench unless stipulated differently by the manufacturer's general requirements and tabulated data.
- Shoring systems must be re-inspected for possible failures by a competent person each time the trench or excavation is left unattended (i.e., lunch, breaks or overnight).

## 15.7 EMPLOYEE TRAINING

All affected Green Bay employees involved in trenching or excavation work must be trained in the requirements of this policy prior to assignment. Refresher training for affected employees shall be provided whenever there is a change in their job assignments, a change in equipment or processes which present a new hazard, when there is a change in established procedures, or whenever a periodic inspection reveals an employee does not have the necessary knowledge or skills to safely work in or around trenches or excavations.

The City of Green Bay shall certify that affected employee training has been accomplished and is being kept up to date. Training records shall contain each employee's name and dates of training.

## 15.8 EMERGENCY AND RESCUE PROCEDURES

If you are about to be buried in a cave-in:

- Yell to get someone's attention.
- Cover your face with your arms.
- Do not struggle to free yourself, just wait calmly for rescue.

If you are watching someone being buried in a cave-in:

- DO NOT attempt to rescue them yourself. NEVER ENTER THE TRENCH!
- Call 911 and report the incident as an "Emergency ... Trench Collapse". Give the dispatcher the trench location, number and type of injuries, trench measurements and special hazard information.
- Mark the spot where the individual was last seen inside the trench. Use a piece of clothing, spray marking paint, a hard hat, or rock to mark the location. If the individual is only partially buried, attach a line to them as soon as possible so that they can be relocated quickly in the event of another cave-in.
- Contact the **DPW 448-3100 (8:00 AM – 4:30 M-F) 492-3735 (after hours)** to report the incident as an "Emergency ... Trench Collapse". Give the

office staff the trench location, and number and type of injuries. (NOTE: Tell office to **dispatch a Vactor unit** to assist in the rescue efforts if one is available internally or from an adjoining municipality.)

- e. Set up a trench box and place over the collapsed area. If extra hydraulic or pneumatic shoring equipment is available on the job site, begin setting up equipment, if needed. **NEVER GO INTO AN UNPROTECTED TRENCH!**
- f. Start hand digging inside the protected area. Never use a backhoe to dig. Continue hand digging until rescue personnel arrive and/or the Vac-All.
- g. If you reach the victim before the emergency personnel arrive avoid moving the victim's neck and spine, and check for airway ... breathing ... and circulation.
- h. Assist emergency personnel with establishing a large enough rescue site and traffic control. Do not allow unauthorized personnel near the area. The area must be preserved for accident investigation by local and state agencies.

## **SECTION 16      FALL PROTECTION**

### **16.1    PURPOSE**

To establish guidelines to protect all employees engaged in work activities exposed to potential falls from elevations and to comply with OSHA guidelines.

### **16.2    POLICY**

This program includes all employees and contractors engaged in work activities who are exposed to: falls from heights of 6 feet or more when engaged in construction activities; falls from 4 feet or more in general activities or falls of 20 feet or more from ladders.

### **16.3    DEFINITIONS**

**Anchor Point:** A secure point of attachment for lifelines, lanyards or decelerations devices. An anchor point must be capable of supporting at least 5000 pounds (3600 pounds if engineered/certified by a qualified person) per person and must be independent of any anchorage being used to support

**Authorized Person:** A person approved or assigned by the city to perform a specific type of duty or to be a specific location or job site (e.g. building maintenance, roof repair, etc.)

**Competent Person:** A person capable of identifying existing and predictable hazards in the surroundings or working conditions which could be hazardous or dangerous to employees or contractors. A person who has the authorization to take prompt corrective action to eliminate such hazards.

**Connector:** A device which is used to couple (connect) parts of the personal fall arrest system.

**Deceleration Device:** Any mechanism, such as a rope grab, rip-stitch lanyard, a specially woven lanyard, tearing or deforming lanyard, automatic self retracting lifeline/lanyard

etc., which services to dissipate a substantial amount of energy during a fall arrest.

**Deceleration Distance:** The additional vertical distance a fall employee travels excluding lifeline elongation and free fall distance, before stopping, from the point at which the deceleration device begins to operate. It is measured as the distance between the location of an employee's body harness attachment point at the moment of activation of the deceleration device during a fall and the location of the attachment point after the employee comes to a full stop.

**Free Fall:** The act of falling before a personal fall arrest system begins to apply force to arrest the fall.

**Free Fall Distance:** The vertical displacement of the fall arrest attachment point on the employee's body harness between the onset of the fall and right before the system begins to apply force to arrest the fall. Free fall-distance must not exceed 6 feet. This distance excludes deceleration distance and lifeline/lanyard elongation distance.

**Full Body Harness:** Webbing/straps which are secured about an employee's body in a manner which will distribute the fall arrest forces over the thighs, pelvis, waist, chest and shoulder. The harness will include the ability to attach to other components of a personal fall arrest system, preferably at the shoulders and/or middle of the back.

**Guardrail System:** A barrier erected to prevent employees from falling to lower levels. This system includes a toe board, mid rails and top rail able to withstand 200 pounds of force applied in any direction.

**Lanyard:** A flexible line of rope or strap that has self-locking snaphook connectors at each end for connecting to body harness, deceleration devices, and anchor points.

**Leading Edge:** The edge of a floor, roof, or other walking/working surface, which changes location as additional floor, roof, etc. is placed or constructed. A leading edge is considered an unprotected side or edge when not under active construction.

**Lifeline:** A component consisting of a flexible line for connection to an anchorage at one end to hang vertically (vertical lifeline) or for connection to anchorages at both ends to stretch horizontally (horizontal lifeline). This serves as a means for connecting other components of a personal fall arrest system to the anchorage.

**Personal Fall Arrest System:** A system used to arrest (catch) an employee in a fall from a working level. The system consists of an anchorage location, connectors and a body harness. The system may also include a lanyard, deceleration device, lifeline, or any combination of the before-mentioned items.

**Qualified Person:** An individual, who by possession of a recognized degree, certificate or professional standing or how by extensive knowledge, training and experience has successfully demonstrated the ability to resolve problems relating to the subject matter, work or project.

**Rope Grab:** A deceleration device, which travels on a lifeline and automatically, by friction, engages the lifeline and locks to arrest the fall of an employee.

**Snaphook:** A connector comprised of a hook-shaped member with a closed keeper which may be opened to permit the hook to receive an object and when released, automatically closes to retain the object. Snaphooks must be self-closing with a self-locking keeper



which remains closed and locked until unlocked and pressed open for connection or disconnection, thus preventing the opportunity for the object to “rollout” of the snaphook.

**Toeboard:** A low protective barrier that will prevent the fall of materials and equipment to lower levels, usually 4 inches or greater in height.

**Total Fall Distance:** The maximum vertical change in distance from the bottom of an individual’s feet at the onset of a fall to the position of the feet at the fall arrest. This includes the free fall distance and the deceleration distance.

**Unprotected Sides and Edges:** Any side or edge of a walking or working surface (e.g. floor, roof, ramp, runway, etc.) where there is no guardrail at least 39 inches high.

## **16.4 TYPES OF FALL PROTECTION SYSTEMS**

1. An articulating man lift provided with a restraint system and full body harness to an anchor point below the waist (preferably at the floor level)
2. Guardrail with toe board, mid rail and top rail.
3. Personal fall arrest system
4. Personal fall restraint system
5. Engineered lifelines.
6. Warning lines.
7. Safety nets.
8. Safety monitors system.

## **16.5 FALL PROTECTION LOCATIONS**

Fall protection is required wherever the potential exists to fall: 6 feet or more when involved in construction activities; 4 feet when involved in general activities; and 20 feet when on a ladder.

## **16.6 FALL PROTECTION GUIDELINES**

### **16.6.1 ENGINEERING CONTROLS**

This should always be the first option for selection whenever possible (e.g. light bulb changing telescoping arm, relocating valve at ground level, etc.)

### **16.6.2 GUARDRAILS**

On all projects only guardrails made from steel, wood, and/or wire rope are acceptable. All guardrail systems must comply with the current OSHA standards (I.e. contain a 42” high top rail, a mid rail and toe board that can withstand 200 pounds of force in any direction). These guard rails will be place in the following areas if necessary or feasible based on job location or requirements:

- On all open side floors
- Around open pits
- On leading edges of roofs or mezzanines

### **16.6.3 PERSONAL FALL PROTECTION SYSTEMS**

All authorized persons on any project who will be required to wear a personal fall arrest or restraint system must comply with the following:

- A full body harness must be used at all times.
- Only shock absorbing lanyards or retractable lanyards must be used to keep impact forces at a minimum on the body.
- Only nylon rope or nylon straps with locking snaphooks are to be used for restraints.
- All lanyards must have self-locking snaphooks.
- The authorized person will inspect all personal fall arrest equipment before each use. Any deteriorated, bent, damaged or impacted equipment or harness showing excessive wear will be removed from service.

### **16.6.4 FALL DISTANCE**

Consideration must be given to the total fall distance. The following factors can affect total fall distance:

1. Length of connecting means (i.e. lanyard length, use of carabineers, snaphooks, etc.)
2. Position and height of anchorage relative to work platform/area (must be kept above the head whenever possible).
3. Position of attachment and D-ring slide on the full body harness.
4. Deployment of shock absorber (max. 42")
5. Movement in the lifeline.
6. Initial position of work before free fall occurs (i.e., sitting, standing, etc.)

### **16.6.5 INSPECTION OF FALL PROTECTION SYSTEMS**

#### **Full Body Harnesses**

Employee shall inspect before each use:

1. Nylon webbing to ensure there are no defects that could weaken the material
2. Harness to verify there are no torn, frayed or broken fibers; pulled stitches or frayed edges on the harness that could weaken the material.
3. Harness to verify the buckles or grommets operate correctly and are not deformed or cracked.
4. Harness is void of holes
5. Rivets are tight and void of deformities
6. Tongue and straps are void of excessive wear.

A competent person shall conduct an annual documented inspection of all harnesses. Harnesses shall be stored to protect from damage. All harnesses involved in a fall will be inspected by a competent person prior to using the harness again.

#### **Lanyards/shock absorbing lanyards**

Employee shall inspect before each use:

1. Lanyard material for cuts, burns abrasions, kinks, knots, broken stitches and

excessive wear.

2. Snaphooks for distortions in the hook, locks and eye.
3. Locking mechanisms seat and lock properly.
4. Locking mechanisms prevents hook from opening.
5. Lanyards are free any signs of damage.
6. Snaphook attachment points are free of defects

A competent person shall conduct an annual documented inspection of all lanyards. Lanyards shall be stored to protect from damage. All lanyards involved in a fall will be destroyed.

### **Snaphooks**

Employee shall inspect before each use.

1. Snaphook and eye do not have distortions.
2. Snaphooks are void of crack or pitted surfaces.
3. Snaphook keeper latch is not bent, distorted or obstructed.
4. Snaphook keeper spring closes securely.
5. Snaphook locking mechanism to verify the keeper latch hooks properly.

A competent person shall conduct an annual documented inspection of all snaphooks. Snaphooks shall be stored to protect from damage. All snaphooks involved in a fall will be destroyed.

### **Self- Retracting Lanyards/Lifelines**

Employee shall inspect before each use.

1. Visually inspect lanyard/lifeline to ensure there is no physical damage.
2. Lanyard/lifeline connections (rivets) are tight.
3. Lanyard/lifeline is free from cuts, burns, abrasions, kinks, knots, broken stitches/strands and excessive wear.
4. Self-retracting lanyard retracts freely.
5. Lanyard/lifeline locking mechanism operates correctly when pulled sharply.

A competent person shall conduct an annual documented inspection of all lanyards/lifelines. Lanyards shall be stored to protect from damage. All lanyards/lifelines involved in a fall will be destroyed.

## **16.6.6 STORAGE AND MAINTENANCE OF FALL PROTECTION EQUIPMENT**

1. Hang equipment in a cool, dry location in a manner that retains its shape.
2. Clean with a mild, nonabrasive soap and hang to dry.
3. Never use this equipment for any purpose other than personal fall arrest.
4. Once exposed to a fall, remove equipment from service immediately.

## **16.7 TRAINING**

Supervisors will ensure that all employees engaged in the use of fall protection are trained bi-annually and have the knowledge to:

- Recognize the fall hazards of their job sites
- Understand the hazards associated with working near fall hazards.
- Work safely in hazardous areas by utilizing appropriate fall protection measures.
- Understand and follow all components of the fall protection program.
- Understand the fall protection standards under ANSI and OSHA.

## **16.8 RESCUE PROCEDURES**

In the event a fall occurs on-site, personnel with the use of an articulating man lift or ladder(s) will rescue employees when feasible. Emergency services should be immediately contacted for alternate rescue.

In the event of a fall, the following individuals shall be notified as soon as possible.

1. Rescue personnel (Emergency Services – 911)
2. Manager/Supervisor
3. Department Head
4. Safety Manager

## **16.9 FALL INVESTIGATION**

The following documentation will be completed as part of the fall investigation:

1. Interviews with staff and witnesses.
2. Injury/Illness report

## **SECTION 17 FIRE SAFETY**

### **17.1 EMERGENCY FIRE/EVACUATION PLANS**

Each facility must have and post a fire/emergency evacuation plan. The plan must include: adequate warning measures for alerting all persons in the area of the existence of a fire or other emergency; rapid reporting to the fire department; evacuation of affected personnel from areas involved in a fire; procedures for containing the fire insofar as it is safe to do so and only to the extent that it is possible to maintain safe exit for personnel so engaged; instruction of personnel who regularly work there concerning the location and proper use of fire extinguishers and in the duties they are to perform in given fire situations; and adequate fire extinguishing equipment that is annually inspected by a responsible authority.

### **17.2 EMERGENCY EXITS**

Exits shall not be locked (chained or otherwise) so as to impede proper evacuation. Exits shall be marked/illuminated in accordance with applicable state statutes and local ordinances.

### **17.3 STORAGE OF FIRE EQUIPMENT**

Fire extinguisher/hoses shall be prominently displayed, labeled for usage and kept clear for easy access at all times.

#### **17.4 DISCHARGED FIRE EXTINGUISHERS**

Do not place a discharged extinguisher back on the bracket. Tag it and report it to your supervisor at once so that it can be recharged or replaced.

#### **17.5 VEHICLE FIRE EXTINGUISHERS**

Designated vehicles (including powered industrial trucks) and equipment shall be equipped with portable fire extinguishers.

#### **17.6 REPORTING EQUIPMENT PROBLEMS**

If you notice a fire extinguisher with a low pressure gauge reading or an expired inspection tag, notify your supervisor at once so that the proper maintenance and testing can be performed.

#### **17.7 MONTHLY INSPECTIONS**

The department head or his/her designee shall ensure fire extinguishers are inspected monthly and documented.

#### **17.8 USE OF FIRE EXTINGUISHERS**

The following chart will help you understand the use of fire extinguishers. In case of fire, be sure you sound the alarm, get others out and call the fire department before attempting to extinguish the fire. A portable fire extinguisher shall be readily available for use within 75 feet of travel distance or less for Class A fires and no more than 50 feet travel distance for Class B fires. Do not use a portable fire extinguisher unless properly trained.

<b><u>TYPE OF FIRE HAZARD</u></b>	<b><u>TYPE OF EXTINGUISHING AGENT</u></b>
<b>CLASS A - Ordinary Combustibles</b> - paper, wood, grass, cloth, trash, etc.	Water
<b>CLASS B - Flammable Liquids</b> - grease, gasoline, oil, paint, thinner, solvents, etc.	Dry chemicals, carbon dioxide to smother the fire.
<b>CLASS C - Energized Electrical Equipment</b> – electrical boxes, panels, transformers, etc. <b>NEVER USE WATER</b> on this kind of fire.	Dry Chemicals, carbon dioxide to smother the fire.
<b>CLASS ABC - Multi-Purpose</b> – Ordinary combustibles, flammable liquids and electrical.	A multi-purpose unit labeled ABC puts out the most common fires.
<b>CLASS D – Combustible Metals</b> - Fires in metals and metal dusts such as magnesium, titanium, zirconium, lithium, potassium and sodium.	Special liquid or dry powder agent.

**USE A FIRE EXTINGUISHER ONLY ON THE  
TYPE OF FIRE FOR WHICH IT IS RECOMMENDED**

## **17.9 STORAGE OF FLAMMABLE LIQUIDS**

Flammable liquids shall be stored in accordance with the Flammable Liquids Code NFPA 30 AND 30A and the directives of the fire department. No storage of flammable or combustible materials shall be allowed in furnace or boiler rooms.

## **17.10 USE OF SAFETY CONTAINERS**

Gasoline and other flammable liquids shall be kept in approved safety containers, stored in a flammable liquid storage cabinet and be properly labeled.

## **17.11 USE OF NON-FLAMMABLE CLEANERS**

Never use gasoline or other solvents to clean hands or parts. A non-flammable cleaner will be furnished and must be used.

## **17.12 SMOKING**

Smoking or open flames are absolutely prohibited in areas where flammable liquids are present.

## **17.13 USE OF ARTIFICIAL LIGHTS**

No artificial lights, except UL approved electric flashlights, shall be used near escaping gasoline or other flammable vapors. (**NOTE:** Entry to a confined space must be done in compliance with the confined space entry procedures.) If you are unsure about the safety of the atmosphere, stay out of the area and call your supervisor and the fire department; they will check the atmosphere.

## **17.14 BURNING**

Burning shall be done in strict compliance with local ordinances. Caution must be observed. No flammable liquids shall be used to start a fire.

## **SECTION 18 FIRST AID**

The City provides first aid supplies for the temporary treatment of minor injuries such as cuts, scratches, etc. All employees should know the location of the first aid supplies. All injuries, however small, shall be treated to prevent infection. As first aid supplies are used, replacement should be requested. The Department Head or designee shall ensure that all first aid kits are inspected and restocked on a monthly basis.

## **18.1 REQUESTING MEDICAL ASSISTANCE**

In case of serious injury:

1. Call 911 - request a rescue squad immediately.
2. Keep the injured party warm and as comfortable as possible.
3. Never move an injured person unless it is absolutely necessary.

4. Keep onlookers away from injured.
5. Transport for serious injury shall only be accomplished by rescue squad.

## **SECTION 19            FLEET SAFETY**

### **19.1    GENERAL RESPONSIBILITIES**

All employees operating City of Green Bay vehicles or heavy construction equipment shall be thoroughly familiar with and obey all State and local laws and/or regulations governing motor vehicle or equipment operation. Careless or negligent operation of vehicles or heavy construction equipment is prohibited. If a City of Green Bay employee is required to have and maintain a valid driver's license during their incumbency, it is the employee's responsibility to notify supervision or management immediately when their driver's license is restricted, suspended or revoked. Failure to do so may result in the imposition of disciplinary action up to and including discharge.

### **19.2    SEATBELT/SHOULDER HARNESS USE**

Seatbelts and shoulder harnesses shall be worn while operating or riding in a city owned commercial and fleet vehicles, personal vehicles while on duty and when operating large turf and construction-type equipment that has been equipped with a manufacturer's installed seatbelt and a rollover protection (ROP) feature. Inoperative or missing seatbelts and/or harnesses shall immediately be reported to the supervisor. The vehicle or equipment shall not be operated until the repair(s) have been made.

Exceptions to this are emergency medical specialist performing emergency medical duties, tiller training (SPS 330.09) and the operation of an authorized emergency vehicle by a law enforcement officer under which compliance could endanger the safety of the operator or another (State statute 347.48 (2m) (dm)).

### **19.3    EMERGENCY VEHICLE OPERATION**

Employees who operate authorized emergency vehicles shall be required to operate their vehicle with respect to State Statute 346.03 and department policy.

***NOTE: The exemptions granted the operator of an authorized emergency vehicle by this section do not relieve such operator from the duty to drive with due regard under the circumstances for the safety of all persons nor do they protect such operator from the consequences of his/her reckless disregard for the safety of others.***

### **19.4    TRANSPORTATION OF HAZARDOUS MATERIALS**

The hauling of hazardous materials in City owned vehicles is prohibited unless the vehicle is properly placarded, manifests are correctly completed and the driver has the proper CDL hazardous materials endorsement.

Fuel cans shall be secured while transporting. Only DOT approved fuel containers are allowed.

## **19.5 USE OF PRESCRIBED MEDICATIONS**

Employees taking medication, or with a medical condition which may adversely affect their ability to perform their job in a safe manner, are required to immediately inform their supervisor. The City has the right to require the employee provide medical information which describes, to the City's satisfaction, any limitations or side effects affecting employment.

## **19.6 DRIVER RESPONSIBILITY**

The driver/operator of a vehicle or heavy construction equipment is responsible for:

1. Keeping the windshield and windows as clean and clear as possible.
2. Checking and ensuring lights, turn signals, emergency flashers, windshield wipers and horn are in proper working order.
3. For checking all fluid levels (oil, transmission, hydraulic, etc.) each time he/she operates a vehicle/equipment.
4. Keeping the interior of the vehicle clean and free of trash, dirt, mud, papers etc.
5. Promptly reporting any problems that could affect the safe or proper operation of any vehicle or equipment and completing necessary forms.

## **19.7 RIDING ON THE OUTSIDE OF VEHICLES**

Employees shall not ride on the outside of any vehicle. The only exceptions to this rule are SWAT Team members and waste collectors when assigned to a two-person route with a rear loading truck equipped with approved steps and handles. In no instance shall the vehicle exceed 10 mph or the distance exceeds two blocks between stops while someone is riding on the outside of the vehicle. In no instance shall an employee ride on the back of a vehicle while the vehicle is backing.

## **19.8 USE OF CITY OWNED VEHICLES FOR PERSONAL USE**

City employees shall not use any city owned or leased vehicle or equipment for personal use without the verbal or written permission of the department head. Misuse may result in the imposition of disciplinary action up to and including termination.

## **19.9 INDOOR OPERATION**

No gasoline or diesel motors shall be operated, except to start or move the vehicles, in the shop or other enclosed place unless the exhaust is connected to the proper outlet or there is proper ventilation.

## **19.10 PARKING VEHICLES**

When parking conventionally equipped vehicles or equipment, the driver shall:

1. Set parking or hand brake (if so equipped).
2. Put equipment in low gear or park when necessary.
3. Remove ignition key, if possible. Do not leave any vehicle unattended with the motor running or with the keys in the ignition. The only exception to this rule is those vehicles which must, for mechanical reasons, remain running. In this instance, the vehicle may be left unattended if the doors are locked and



- the windows closed.
4. Block rear wheels if grade is steep. Curb front wheels by turning them into the curb.
  5. Ensure that traffic signs and signals are visible to other motorists and are not obstructed by the vehicle.
  6. Exercise care when leaving parking space to avoid accident with moving traffic.

Parking citations are the responsibility of the assigned driver at the time of issue. If a parking citation is not paid within the designated ordinance time frame, or there are multiple unpaid parking citations while using a city vehicle on city time, this activity may be considered an abuse of vehicle privileges.

### **19.11 BACKING VEHICLES**

When backing equipment:

1. Park the vehicle to avoid backing whenever possible.
2. Make sure no person, vehicle, or fixed object is behind the vehicle.
3. Have a spotter (if available) guide you, but remember the driver is fully responsible for backing motions.
4. Do not back too close to the edge of a fill.
5. Make sure backup signal, if required, is in working order.
6. Use the Get-Out-And-Look (G.O.A.L) technique in which the driver physically walks around the vehicle to look for obstacles and/or backing hazards prior to maneuvering the vehicle.

### **19.12 VEHICLE JACK STANDS**

Always use “rated” metal vehicle jack stands when working under a raised vehicle. Use an appropriate safety block(s) to secure the body of a vehicle in a raised position. Never exceed the rated capacity of jack stands.

### **19.13 USE OF PERSONAL VEHICLES**

No personally owned vehicle may be used on city business without the prior approval of the department head. The operator of the vehicle must provide proof of Liability Insurance with limits of not less than \$100,000 per person, \$300,000 per occurrence and statutory minimums for uninsured/underinsured motorists. This requirement shall not be waived. The insurance on the vehicle shall be primary to any City of Green Bay insurance coverage.

### **19.14 MECHANICAL BREAKDOWNS**

When a breakdown occurs in a vehicle you are operating:

1. If possible, move the equipment off the roadway.
2. If the vehicle cannot be moved, make sure you turn on the 4-way vehicle flashers.
3. Contact your supervisor or the dispatcher as soon as possible so the vehicle can be moved and repaired.
4. If the vehicle creates a hazard and cannot be moved, the police should be

notified immediately.

## **19.15 SECURING CARGO**

When carrying large cargo loads, the driver and/or crew are responsible to:

1. Ensure that the cargo is loaded and secured so that the load does not shift, spill or endanger others. If there is any debris, a cover or tarp should be over the load to prevent debris from blowing off. Prohibit anyone from riding on a load.
2. Do not allow cargo to project beyond the side of the vehicle body.
3. Ensure that all loads projecting more than four feet beyond the rear of a vehicle shall be marked by a 12" x 12" red flag or cloth secured to the end of the object.
4. Ensure that shovels and similar tools are placed and secured in or on the vehicle so that they do not project beyond the body and cannot fall off.
5. Tiedowns must meet the following requirements:
  - Tiedowns must not contain knots and must be secured and attached securely as to not allow movement or shifting of the load.
  - Tiedowns must be located inboard of the rub rails. When this is not possible, edge protection must be used.
  - The aggregate working load limit of any securing system must be at least  $\frac{1}{2}$  times the weight of the article or group of articles being transported. The aggregate working load limit is the sum of the following:  $\frac{1}{2}$  of the working load limit of each associated connector or attachment mechanism used to secure a part of the article of cargo to the vehicle AND  $\frac{1}{2}$  of the working load limit for each end section of a tiedown that is attached to an anchor point.
  - At least one tiedown is required for cargo 5-feet or less AND 1,100 pounds or less.
  - At least two tiedowns are required if the cargo is 5-feet or less but weighs more than 1,100 pounds OR is longer than 5-feet but less than or equal to 10-feet irrespective of weight.
  - For cargo longer than 10-feet, one additional tiedown is required for every additional 10-feet of length or fraction thereof.
  - Heavy vehicles, equipment and machinery will be secured using at least four tiedowns each with a working load limit of at least 5,000 pounds.
6. The cargo must be secured in such a way as to not affect the vehicle's stability or maneuverability.

## **19.16 SALTER/SANDER AUGER SAFETY**

Before the spreader is powered, keep personnel clear from the spreader and the surrounding area.

Never attempt to operate the auger with the top cover in the rear open position or when auger is unguarded.

Do not alter, disconnect, or bypass the safety interlock system (if equipped) on the spreader assembly.

Never attempt to clear a material bridging problem, material jam or clean the spreader with the truck engine running and/or when the PTO switch to operate the spreader is in the ON position.

Before opening a tailgate, cover, grate, guard, or plate on or near the spreader assembly, first turn off all power to the spreader and turn the truck engine off keeping the ignition keys on your person (e.g., in your pocket). Be sure all guards are put back in place prior to operating the spreader.

Use special care in clearing a jammed auger. Be sure all power is turned off and that the truck ignition keys are maintained on your person (e.g., in your pocket). Open the bottom cover door being careful of added material weight as it swings open. There may be some pressure remaining against a jammed auger which could result in a small amount of rotation when the jam is released, so always use a SHOVEL HANDLE or PRY BAR (keeping hands clear) to loosen any jammed material. When the jam is cleared, close the bottom cover door completely. When personnel are clear, start the engine and power the auger briefly to be sure that material is flowing.

Never enter or allow anyone to enter, into the dump body while the tailgate spreader is operating. Always turn off all power, remove engine ignition keys while keeping them on your person (e.g., in your pocket), and lower the dump body before attempting any service work inside the dump body.

**NOTE:** All formal servicing (greasing/adjusting), repairs, or maintenance **SHALL** be completed by a qualified mechanic using the ***Lockout/Tagout Procedure For Vehicles and Equipment***. Operators, drivers, and mechanics shall review the specific equipment OPERATOR'S MANUAL(S) for additional requirements.

**Operators/Drivers shall not perform servicing or maintenance.**

## **SECTION 20      HAZARD COMMUNICATION**

### **20.1    PURPOSE**

The purpose of this policy is to ensure that:

- Hazardous substances present in the work place are identified and labeled.
- Employees have ready access to information on the hazards of these substances.
- Employees are given information on how to prevent injury or illness due to chemical exposure.

### **20.2    POLICY**

Employees will be informed of the contents of the Hazard Communication Standard. This includes the hazardous properties of chemicals with which they work, safe handling procedures, and methods to protect themselves from these chemicals. Employees will also be informed of the hazards associated with non-routine tasks as they come in contact with them.

### **20.3 RESPONSIBILITIES**

Department heads and supervisors or their designee shall be responsible for the following:

1. Ensuring that the employees within their direction whom are impacted by this policy are properly trained;
2. Providing oversight of those employees under their direction to ensure that they are using required Personal Protective Equipment and that they are using good work practices;
3. Maintaining required Material Safety Data Sheets (MSDS) for the hazardous chemicals used in their department; and ensuring containers are properly labeled.
4. Maintaining and updating hazardous substance listing.
5. Maintaining training records.

All employees are responsible for:

1. Following directions in the use and handling of all chemicals as prescribed on the material safety data sheets (MSDS) and instructed by the supervisor.
2. Becoming familiar with the information on the MSDS.
3. Notifying their supervisor of any condition which may have an adverse impact on employee safety/health.

### **20.4 HAZARD ANALYSIS**

Each chemical in the workplace shall be evaluated for hazardous properties. Hazardous properties include toxicity, corrosiveness, irritation effects, sensitization potential, flammability, instability, oxidizing effects, and reactivity. Resources to be used in the hazard review include vendor MSDS's and other internal and literature sources.

### **20.5 MATERIAL SAFETY DATA SHEETS (MSDS)**

- An MSDS is a technical report that explains how to use, handle, and store chemicals safely.
- A binder with an MSDS for every substance on the list of hazardous chemicals will be kept.
- Each department should maintain an MSDS for each hazardous material in their particular area(s).
- MSDS's will be made readily available to all employees during their shifts.
- A master list of all MSDS's should be available.

### **20.6 LIST OF HAZARDOUS CHEMICALS**

- A master inventory of hazardous substances must be compiled.
- The master inventory list must be readily available and accessible for review.
- A list identifying the chemicals used in each of the departments must be kept and made available in each department.
- The master list of hazardous substances must be updated as needed.

### **20.7 LABELING**

Labels are required to quickly inform people of what they need to know in order to properly protect themselves.

Labeling procedures and policies are as follows:

Person(s) responsible for inbound shipments will evaluate labels on incoming containers. Each label will be checked for:

1. Identity of substance.
2. Appropriate hazard warning.
3. Name and address of the manufacturer.

If the label is not appropriate, the supervisor in the receiving department will notify the manufacturer or distributor.

If the label is not received within 30 days of the initial notification, the supervisor in the receiving department will send a second request to the manufacturer or distributor.

If an appropriate label is not received after the second 30 days, the department head will direct the appropriate supervisor to obtain and place on the container an appropriate label that has not yet been received from the manufacturer.

The supervisor responsible for shipments is responsible for updating labels when new information is received.

Labels will be removed if they are incorrect and when the container is empty if it will be used for other materials. All supervisors are responsible for seeing that all containers used in their departments are labeled properly and remain legible.

Piping systems shall:

1. Be labeled at access points and every ten feet where the piping is eight feet or closer to employee contact.
2. Be labeled as follows:

<u>Substance</u>	<u>Color</u>
Materials Hazardous to Life and Property	Yellow
Fire Protective Materials	Red
Low Hazard Liquids	Green
Low Hazard Gases	Blue

3. Include the materials contained in the piping and the direction the material is flowing.

## **20.8 EMPLOYEE TRAINING**

All affected employees will be trained and informed at the time of initial assignment on the Hazard Communication Standard and whenever a new hazard is introduced into the work place. Department heads and supervisors will be trained regarding hazard and appropriate protective measures so they will be available to answer questions from employees and provide daily monitoring of safe work practices.

## **20.9 CONTRACTORS**

When outside contractors perform work on property owned and controlled by the City of Green Bay or when the contractor exposes City employees to hazardous substances, the department head or designee must do the following:

- a. Inform the contractor/City of the hazardous substances stored and/or used on the property;

- b. Provide the contractor/City with access to the appropriate material safety data sheets and any other information concerning the hazardous substances that they may encounter;
- c. Provide information about the labeling system used by the City/contractor; and
- d. Provide any additional precautionary measures that need to be taken to protect employees during the workplace's normal operating conditions.

## **SECTION 21        HEARING CONSERVATION**

### **21.1    GENERAL RULE**

Wear hearing protection for designated jobs or tasks. If in doubt, ask your supervisor.

### **21.2    AUDIOMETRIC TESTING**

Audiometric testing will be performed on all employees whose exposures equal or exceed an 8-hour time-weighted-average of 85 decibels (Action level). Audiometric testing may be conducted at City Hall using the MAICO sound booth.

Audiometric tests will be performed by a licensed or certified audiologist, otolaryngologist, or other physician, or by a technician who is certified by the Council of Accreditation in Occupational Hearing Conservation, or who has satisfactorily demonstrated competence in administering audiometric examinations. A technician who performs audiometric tests must be responsible to an audiologist, otolaryngologist or physician.

The audio booth equipment will be professionally tested and calibrated annually.

#### **Baseline Audiogram**

A baseline audiogram will be conducted within 6 months of an employee's first exposure at above the action level in order to establish a valid baseline audiogram against which subsequent audiograms can be compared.

Testing to establish a baseline audiogram will be preceded by at least 14 hours without exposure to workplace noise. Hearing protectors may be used as a substitute for the requirement that baseline audiograms be preceded by 14 hours without exposure to workplace noise.

The City Nurse will notify employees of the need to avoid high levels of non-occupational noise exposure during the 14-hour period immediately preceding the audiometric examination.

Audiograms will be conducted at least annually after obtaining the baseline audiogram for each employee exposed at or above an 8-hour time-weighted-average of 85 decibels.

The City Nurse will maintain a record of all employee audiometric test records. This record will include:

1. Name and job classification of the employee.
2. Date of the audiogram.

3. The examiner's name.

The following job classifications are required to submit for annual audiometric testing:

Fire-All Line Personnel and Mechanics  
Parks-Full Time Operational Personnel  
Forestry Personnel  
Police-All Sworn Officers and Mechanics  
Public Works - Operational Personnel excluding Parking Utility  
Public Works – Engineering – Engineering Aides  
Transit-All Maintenance personnel  
Water Utility-All Operational Personnel

Exit Audiogram

Upon termination of employment, a final exit audiogram will be administered. This audiogram will be conducted in the same manner as annual audiograms.

### **21.3 AUDIOMETRIC EVALUATION**

Each employee's annual audiogram will be compared to his/her baseline audiogram by qualified evaluator to determine if a Standard Threshold Shift (STS) has occurred. A Standard Threshold Shift is defined by OSHA as a change in hearing threshold relative to the baseline of an average of 10dB or more at 2000, 3000, and 4000 Hz in either ear.

In determining if a Standard Threshold Shift has occurred, an allowance can be made for the contribution of aging (presbycusis). The age correction values to be used are found in Appendix F of §1910.95.

If an annual audiogram indicates that an employee has incurred a Standard Threshold Shift, the person will be scheduled for a retest within 30 days to determine if the threshold shift is persistent.

The following procedures will be taken if a comparison of the baseline audiogram indicates a persistent standard threshold shift.

- A. Employees not using hearing protectors will be trained, fitted, and required to use hearing protectors if they are exposed to an 8 hour time-weighted-average sound level of 85 decibels or greater.
- B. Employees already using hearing protectors will be retrained, refitted, and required to use hearing protectors.
- C. The City Nurse will inform the employee, in writing, within 21 days of this determination, of the existence of a permanent Standard Threshold Shift.
- D. The City Nurse will counsel the employee on the importance of using hearing protectors and refer the employee for further clinical evaluation if necessary.
- E. Persistent significant threshold shifts must be entered on the OSHA 300 Log if determined to be work-related.

If subsequent audiometric testing of an employee, whose exposure to noise is less than an 8-hour time-weighted-average of 90 decibels, indicates that a Standard Threshold Shift is not persistent, the City Nurse:

Shall inform the employee of the new audiometric interpretation and,  
Discontinue the required use of hearing protectors for that employee.

## **21.4 HEARING PROTECTION REQUIREMENTS**

Because of the diversity, flexibility and seasonality of municipal operations it is not possible to assess exactly when a particular job may or may not be at the 85dBA time-weighted-average (employees exposed to > 85dBA averaged over an 8-hour workday). Therefore, employees engaged in operations or using equipment that MAY be within the 85dBA time-weighted-average and are required to wear hearing protection. Some examples include but are not limited to:

- Chain saws
- Compressors (close proximity to)
- Grinder operations (prolonged use)
- Lawn Mowers
- Pneumatic tools (prolonged use)
- Power saws
- Tractors
- Heavy Equipment

Whenever sound levels in the work area are excessive and engineering controls cannot reduce the level, hearing protection shall be worn. The following chart should be used to determine the need for hearing protection and permissible exposure limits:

<b>Duration per day, hours</b>	<b>Sound level (DBA)</b>
8	90
6	92
4	95
3	97
2	100
1.5	102
1	105

## **21.5 RADIOS**

Sound level volumes for all radios are not permitted above 85 decibels.

Headset radios, ear bud type radios, as well as any other type of radio determined to be unsafe are not permitted.

## **SECTION 22 HOISTS AND CRANES**

### **22.1 TRAINED EMPLOYEES**

Only trained, designated employees shall operate cranes and hoists.



## **22.2 NO RIDING ON EQUIPMENT**

No person shall be permitted to ride the hook, sling or load of any equipment.

*Note: Exception to this are trained arborist per ANSI standard 133.5.7.9*

## **22.3 HOISE AND RAIL LOAD LIMITS**

Hoist load limits, as specified by the manufacturer, shall be clearly marked and shall not be exceeded under any circumstances. Hoist rail load rating shall be conspicuously marked.

## **22.4 UNDER A LOAD**

No one shall be under a suspended load or inside the angle of a winch line.

## **22.5 NO UNATTENDED LOADS**

Suspended loads shall not be left unattended.

## **22.6 INSPECTION**

A thorough, monthly, written inspection report shall be completed on each crane and hoist. In addition, prior to each use, all control mechanisms, safety devices, attachments and brake systems shall be checked. Each crane shall be professionally inspected annually.

## **22.7 DESIGNATED OBSERVER**

An employee shall be designated to observe clearance of the equipment and give timely warning for all operations where it is difficult for the operator to maintain the desired clearance by visual means.

## **22.8 TAG LINE**

When guiding a suspended load into position, a non-conductive rope or tag line shall be used to permit maintenance of a safe distance from the drop zone. Also, a tag line can assist in case a suspended load should fall or contact an electrical power source.

## **SECTION 23      INSPECTION OPERATIONS**

Building Entrances - Be alert to hazards when entering a building (stairs, ladders, rough floors, etc...).

Pets - Where there is a dog present, do not attempt to pet the dog. If bitten, report this to the Safety Manager/Occupational Health Nurse, Police Department, and to your supervisor so that the necessary injury forms can be completed.

Poor Lighting - Use a flashlight in poorly lighted rooms, basements, etc. Never use matches or an open flame.

Slips and Falls - Be alert to slippery, wet surfaces, ice build-up, etc. Always use handrails on stairways.

Footwear - Wear good traction footwear, especially in bad weather.

Hazards - Watch for upturned or protruding nails, objects lying about the premises, and general tripping hazards.

## **SECTION 24            LADDERS AND SCAFFOLDING**

### **24.1    LADDERS**

Metal Ladders - Metal ladders shall not be used in the vicinity of electrical circuits.

Inspection - Ladders shall be inspected periodically to ensure that steps or back bar members are not loose or broken.

Non-skid Feet - All straight and extension ladders shall have non-skid feet.

Placement of Ladder - The feet of the ladder should be placed about one-fourth as long as the vertical (i.e. if an 8-foot ladder is leaned up against a wall, the feet should be set 2 feet from the wall). Ladders should never be placed against windows.

Never stand on top step of a stepladder.

Only one person shall be on a ladder at a time.

Always face a ladder when ascending or descending.

Clean muddy or slippery shoes before climbing ladder.

Rungs shall be kept clean and free of grease, oil, and caked-on dirt.

If it is necessary to place a ladder near a door or where there is potential foot traffic, warning signals or other precautions to prevent accidental contact shall be used.

### **24.2    SCAFFOLDING**

Proper supervision is required to erect scaffolding.

Planks and other materials used in building scaffolding must be sound and free from knots.

Planks shall be in good condition and shall never be painted.

## **SECTION 25            LEAD**

### **25.1    PURPOSE**

The purpose of the lead policy is to inform employees of the potential hazards of working with lead, limit exposure to lead and establish procedures for working with lead.

### **25.2    POLICY**

They shall ensure that all lead disturbing activities involving facilities or equipment used by children under six years old or target housing is performed by certified employees. All work is to be done using methods that maintain employee or occupant exposures below established permissible exposure limits (50 µg/dl).

### **25.3 LEAD IDENTIFICATION**

The following warning signs shall be posted in each work area where an employee's exposure to lead is above the permissible exposure limit.

WARNING  
LEAD WORK AREA  
POISON  
NO SMOKING OR EATING

These signs shall be illuminated and cleaned as necessary so that the legend is readily visible. Signs that contradict or detract from the meaning of the sign are prohibited.

### **25.4 LEAD DISTURBING ACTIVITIES**

Examples of activities that may result in the disturbance of suspected lead-containing materials may include:

Sanding  
Drilling  
Welding  
Demolition  
Window replacement  
Pipe cutting

### **25.5 LEAD ABATEMENT PROJECTS**

All lead abatement projects shall be performed under controlled conditions by a certified lead abatement contractor.

### **25.6 TRAINING**

All employees exposed to lead above the action level (30mg/m<sup>3</sup>) or who may suffer skin or eye irritation from lead compounds will be trained initially (within 180 days) and annually in the following areas:

- The content of the CFR 1910.1025 standard and its appendices
- Specific hazards related to their work environment – including locations and potential sources of lead exposures in the buildings/facilities
- The purpose, proper selection, fitting, use and limitations of respirators
- The purpose and description of the medical surveillance program
- The engineering controls and work practices associated with employee's job assignment
- Contents of compliance plans in effect
- Instructions to employees that chelating agents should not be routinely used to remove lead from their bodies
- Protective measures which can be taken
- Potential health effects associated with lead exposure
- Their rights under the standard

## **25.7 EMERGENCY RELEASE OR DISTURBANCE**

The lead program administrator shall be notified of activities that may result in the disturbance of lead containing materials.

Emergencies include situations where a rapid response is necessary to mitigate damage or prevent further damage to the building or its occupants in which lead or suspected lead containing material may become airborne. Examples may include:

- Sanding lead based paint or material;
- Demolition of areas containing or suspected to contain lead;
- Cutting lead-containing pipe;
- Discovery of lead during renovation.

## **25.8 LEAD IN THE WORKPLACE**

Lead can be found in many areas of municipal work places. Common sources of lead exposure include, but are not limited to:

- Fumes containing lead are released during welding if metal coatings are made with lead
- Pipes, fixtures, solder and water tanks
- Vehicle parts such as batteries and radiators
- Ammunition/gun ranges
- Painted surfaces prior to 1978

Employees performing the following job functions should attempt to minimize exposure to lead in their daily activities:

Plumbers/water utilities, painters, bridge maintenance workers, custodial/maintenance workers, welders, mechanics and mechanics helpers, carpenters, firing range clean-up or maintenance.

## **25.9 HYGIENE**

Eating, drinking, smoking or chewing tobacco is prohibited in work areas where there is lead exposure or a potential for lead exposure. If an employee is exposed above the PEL, the employee will be provided a place to shower and change clothing.

## **25.10 MEDICAL SURVEILLANCE AND REMOVAL**

Employees who are exposed at the action level (30 µg/dl) must receive blood tests, a medical exam, and consultation. If the employee's blood level reaches 40 µg/dl they will be tested every two months. If the employee's blood lead level is at or above 50 µg/dl, they will be tested again within two weeks. Any affected employee will be removed from exposure to lead if their blood lead level is still at or above 50 µg/dl on the second test or if it is necessary for other medical reasons.

## **25.11 HOUSEKEEPING**

Vacuum cleaners must have HEPA filters (high-efficiency particulate). Wet mopping and other cleaning methods that keep dust from getting into the air should be used. **Dry sweeping or shoveling should be avoided.**

## **SECTION 26**

## **LOCKOUT/TAGOUT**

### **26.1 PURPOSE**

This procedure establishes the requirements for the lockout or tagout of hazardous energy isolating devices. It shall be used to ensure that machinery or equipment is isolated from all potentially hazardous energy and locked out or tagged out before employees perform any servicing, repair, or maintenance activities where the unexpected energization, start-up, or release of stored energy could cause injury to the employee(s) performing the service, repair, or maintenance.

### **26.2 RESPONSIBILITIES**

All supervisors and employees shall be instructed in the safety significance of the lockout and tagout procedure. Only those personnel described by name and/or title are authorized to lockout or tagout machinery or equipment. Each new or transferred employee and other employees whose work operations are, or may be, in the area shall be instructed in the purpose and use of the lockout and tagout procedure by his/her supervisor.

### **26.3 PREPARATION FOR APPLICATION & USE OF LOCKOUT/TAGOUT PROCEDURE**

An inventory/survey of all forms of hazardous energy sources has been made to identify all isolating devices, and to determine which switch(es), valve(s) or other energy isolating device applies to the machinery or equipment to be locked or tagged out. More than one energy source may be involved.

### **26.4 SEQUENCE OF LOCKOUT/TAGOUT PROCEDURE**

All affected employees will be notified that a lockout/tagout is going to be utilized and the reason therefore.

If the machinery or equipment is operating, it shall be shut down following the normal stopping methods. Then the following methods shall be used to lockout or tagout these five most common forms of energy sources.

#### **ELECTRICAL**

1. Unplug machine, use plug lockout or use a disconnect switch with padlocks, lockouts and tags.
2. Lock and tagout all power sources.
3. Bleed off stored electrical energy to zero state.
4. Use a tester to ensure all circuits are dead.

#### **PNEUMATIC**

1. Release pressure to zero energy state.
2. Use shut-off valves, energy isolation valves, padlocks, and lockouts to lockout energy source.

#### **HYDRAULIC**

1. Release pressure to zero energy state.
2. Use shut-off valves, energy isolation valves, padlocks, and lockouts to lockout energy state.

## **FLUIDS AND GASES**

1. Recognize all hazards.
2. Insert a blank or blind in the line.
3. Use valve lockouts, padlocks, and lockouts at isolating source.

## **MECHANICAL**

1. Release and/or block all stored mechanical energy.
2. Be aware of gravity, springs, tension, and other sources of energy that are not always obvious.
3. Use blocks to restraint energy.
4. Use padlocks, lockouts, or tags to lock or tagout mechanical energy.

After locking out the machine or equipment, test the piece for operation, if it works, then the lockout operation has not been successful, or there is another source of hazardous energy that has not been properly locked out and the entire procedure must be repeated. After a successful test has been achieved, the work can then proceed. CAUTION: Return operating control(s) to "neutral" or "off" position after the test.

## **26.5 RESTORING MACHINES OR EQUIPMENT TO NORMAL OPERATIONS**

1. After servicing, maintenance and/or repairs have been completed the machine or equipment is ready for normal operations. Check the area around the machine or equipment to ensure that no one is exposed to the operating parts of the machine or equipment.
2. After all tools have been removed, guards have been reinstalled and all employees are in the clear, remove all lockout and/or tagout devices. Re-engage all energy isolating devices to restore energy to the machine or equipment.

## **26.6 PROCEDURES INVOLVING MORE THAN ONE PERSON**

If more than one individual is required to work on the machine or equipment, thus requiring more than one lockout or tagout device, each person shall place his/her own personal lockout and/or tagout device on the energy isolating device. Hasp, gang, or multiple lockout/tagout devices are to be used where an energy isolating device has provision for only a single lockout/tagout device.

Each authorized employee **MUST:**

- Use his/her personal lockout/tagout device.
- Install his/her personal device only.
- Remove his/her personal device only.
- Never exchange personal devices with others.

## **26.7 BASIC RULES FOR USING LOCKOUT/TAGOUT PROCEDURE**

All equipment shall be locked or tagged to protect against accidental or inadvertent operation when such operation could cause injury to personnel. Do not attempt to operate any switch, valve, or other energy isolating device where it is locked or tagged out.

All outside contractors shall be informed of the elements of this program and shall comply with its procedure.

## **26.8 PERIODIC EVALUATIONS**

Periodically (at least annually) the effectiveness of the entire program will be evaluated. The date of the inspection/evaluation will be documented on the Annual Inspection Report and maintained as part of this program until the next annual evaluation replaces it.

## **SECTION 27 MATERIAL HANDLING**

### **27.1 LIFTING**

When lifting heavy objects:

1. Lift heavy objects with legs, not with the back. Bend your knees.
2. Maintain proper balance while keeping the back as straight as possible. Keep elbows close to body.
3. If the object is too heavy to handle safely alone, get help.
4. If the load obscures your vision, check the area to ensure that your intended path is free of obstructions.

### **27.2 STACKING MATERIALS**

When piling materials, make sure the base is firm and level. Cross tie each layer. Keep piles level and not stacked too high (use shoulder height as a guidelines). Keep aisles clear and with adequate space to work in them.

### **27.3 SUSPENDED LOADS**

Employees shall never work under a suspended load or leave equipment unattended with a suspended load.

### **27.4 RIDING ON A HOISTING DEVICE**

Employees shall never ride on a cable, sling, chain or other hoisting device, or on material being moved by means of a crane.

*Note: Exception to this are trained arborist following ANSI standard Z133.1.5.7.9*

### **27.5 USE OF CHEMICALS, PESTICIDES, HERBICIDES AND FUNGICIDES**

All chemicals must be used in strict compliance with manufacturer's instructions and applicable Federal, State, and Local laws, regulations, and ordinances.

1. Make sure you read and follow manufacturer's directions.
2. Wear protective clothing as recommended by the manufacturer which might include: gloves, boots, hats, goggles, long-sleeve shirt, apron pants, face protection, and a respirator.
3. Mix only what you need. Excess chemicals must be marked and stored as recommended by the manufacturer.
4. Notify your supervisor at once of any spillage of chemicals.
5. Follow manufacturer's recommendation when disposing of containers. Some containers must be burned or buried depending on toxicity.

## 27.6 HANDLING HAZARDOUS MATERIALS

**Incompatibility** -Always read product labels and material safety data sheets (MSDS) before mixing or combining hazardous materials.

**Labeling** -All containers should be labeled to identify the substances they contain. The label shall reflect the numeric rating of the hazard from flammability, health, and reactivity.

**Mixing** -Certain liquids can generate static electricity when they are stirred or transferred. To avoid the possibility of a static spark igniting the flammable vapors, the bulk container should be grounded to a permanent source, while a bonding wire should be provided between bulk (dispensing) container and the receiving container. Make certain the area is well ventilated and that you follow mixing instructions on the label or material safety data sheets (MSDS).

**Moving and carrying chemicals** -Always carry chemicals in approved containers.

**Storage** -Always store chemicals according to instructions on product label or material safety data sheets (MSDS).

**Disposal** -Always follow approved procedures for disposal. Never pour hazardous chemicals or waste down the sewers or drains or on the ground.

## SECTION 28 OFFICE SAFETY

Every employee shall be responsible to ensure that his/her own desk and work area is clean and orderly.

Keep an eye open for loose or threadbare floor coverings and report such findings promptly.

Be extra cautious when you come up to a door that can be opened in your direction. Take it easy when pushing open such a door and slow down when coming to a "blind" corner.

Haste when walking between desks can result in bruises and falls. Keep all electrical cords out of aiseways.

All file, desk and table drawers shall be kept closed when not in use. As soon as you leave them, close them. Never open more than one file drawer at a time.

Office tables, desks and chairs must be maintained in good condition and free from sharp corners, projecting edges, wobbly legs, etc.

Never use chairs, desks or other office furniture as a makeshift ladder. Always use a stepladder. Don't overreach and lose your balance.

Keep the blade of paper cutters closed when not in use.

Be sure all electrical equipment is grounded and the cord is in good condition. If a machine gives you a shock or starts smoking, unplug it, and report the defective device immediately to your supervisor.



## **SECTION 29**

## **PERSONAL PROTECTIVE EQUIPMENT**

### **29.1 WEARING PROTECTIVE EQUIPMENT**

Employees shall wear personal protective safety equipment that has been assigned to them when performing their jobs.

### **29.2 EYE PROTECTION**

Eye protection includes safety glasses, safety glasses with face shields, or goggles. Suitable eye and face protective equipment shall be worn at all times where eye injuries may otherwise occur from the hazards of flying objects, glare, liquids or injurious radiation. All safety glasses and goggles shall comply with requirements of ANSI Z87.1. Employees should use good judgment to determine if their current task requires eye protection, some examples include: (**NOTE:** This is not an all inclusive list, it is merely intended to provide some examples of possible situations when eye protection is required.)

- a) Grinding, cutting, milling or drilling with power tools.
- b) Using impact wrenches and compressed air tools.
- c) Using punches, chisels, wedges, picks or other impact tools.
- d) Chipping, scraping or scaling paint, rust, carbon or other materials.
- e) When firing a handgun at the police range.
- f) Chipping, saw cutting, or breaking concrete.
- g) Pipe cutting and threading.
- h) Using paint remover.
- i) Using power activated tools.
- j) Soldering.
- k) Cleaning dust or dirt from vehicles, machinery, etc.
- l) Sandblasting or air cleaning operations.
- m) Using metal cutting lathes, sharpeners, drill press, power hack saw and other metal working tools.
- n) Using woodworking equipment/tools.
- o) Tree removal or trimming, brush chipping or stump removal (Also requires the use of faceshield in addition to safety glasses.)
- p) Using brush cutters or chain saws.
- q) Steam cleaning.
- r) Washing vehicle parts with soaps or solvents.
- s) Working under vehicles.
- t) Using trimmers and edgers.
- u) When handling batteries, acids, caustics and other harmful dust, liquids or gases.
- v) When performing electrical switching operations or activating high voltage circuits where arcs may occur.
- w) A face shield with the proper filter lens or welder's lens or welder's goggles shall be worn in all welding and cutting operations or in any other circumstance that would expose the employee to a risk of eye injury.

A full plastic face shield shall be worn when handling acids, caustics, or other harmful dusts, liquids or gases.

Safety glasses or safety goggles shall be worn when performing electrical switching

operations or activating high voltage circuits where arcs may occur. A face shield with the proper filter/welders lens or welder goggles shall be worn in all welding and cutting operations.

### **29.3 HARD HATS**

Hard hats meeting the requirements of ANSI Z89.1 or revisions to this standard, shall be worn. Hard hats shall be worn by all municipal personnel when involved in the following activities:

- A. All water, sewer, street, and construction operations where work is being done with lifting equipment, underground level where personnel are working above other workers, or where other potential of head injury exists,
- B. All Park/Forestry operations similar to that of "A" above,
- C. All forestry/tree trimming operations or where "I" below applies,
- D. All employees and/or electricians for construction, maintenance, or repair of street lighting, traffic signal facilities or when using an aerial lift,
- E. All employees involved in aerial lift operations (bucket operator as well as ground personnel),
- F. All personnel inspecting work projects or building projects where the potential for head injuries exists, to include Inspection, Water Utility and Public Works,
- G. All personnel present, for any reason, on construction sites where hard hat signs are posted,
- H. In locations damaged by disaster, fire, flood or other cause which could result in structural damage or falling material,
- I. Wherever a hazard exists that would expose the head to injury or upon supervisor's direction,
- J. All supervisors involved in the above types of work.

### **29.4 HEARING PROTECTION**

All employees working in an area where the sound level exceeds 85dB shall wear hearing protection. This may consist of ear muffs or ear plugs. (See Section 21, "Hearing Protection Requirements" for specific requirements).

### **29.5 SUITABLE CLOTHING**

All employees including temporary and seasonal employees shall wear suitable clothing for their work conditions. All field personnel must wear long pants, shirt, hard-soled shoes and any other item issued to them by the City.

### **29.6 SAFETY VESTS**

Workers in or near the roadway will wear reflective vests or cross straps on their clothing. All employees shall wear ANSI 107/207 Class 2 approved retro-reflective clothing.

## **29.7 GLOVES**

Appropriate gloves shall be worn when handling or in operations involving (this is not an all inclusive list, other situations where gloves are required may arise):

- A. Rough materials such as lumber, stone, brush, etc.
- B. Solid waste collection
- C. Irritating chemicals
- D. Hot bituminous materials
- E. Blood or other body fluids (see Section 12, "Bloodborne Pathogens Standard" for specific requirements)

## **29.8 SAFETY HARNESS/LIFELINE**

Safety Harness/Belts with lifeline shall be worn by employees working in the aerial bucket, as required in "Confined Space Entry Procedure" (Section 13), "Fall Protection Locations" (Section 16) and in other situations as required. This equipment shall meet appropriate standards and shall be inspected prior to each use.

## **29.9 SEATBELTS**

All employees shall have their seatbelts properly fastened whenever they are in a motor vehicle which is so equipped and in motion. (Paragraph 28.9 does not apply to the operation of an authorized emergency vehicle by a law enforcement officer or other authorized operator under circumstances in which compliance could endanger the safety of the operator; paragraph 28.9 does not apply to the operator of a vehicle while on route which requires the operator to make more than 10 stops per mile involving an exit from the vehicle in the scope of his or her employment).

## **29.10 WORK SHOES/BOOTS**

Approved work shoes/boots shall be interpreted to mean hard-soled, work-type shoes. Safety shoes must meet ASTM F 2412-05 and ASTM F 2413-05 (formerly ANSI Z41 performance standard). Hard sole is interpreted to mean a sole that is made from hard leather, composite or other man-made materials that are resistant to puncture and absorption of oil and other substances. Foot protection must be worn if there is a danger of foot injuries due to 1) falling or rolling objects; 2) from objects that could pierce the sole and 3) exposed to electrical hazards. Specific requirements of work shoes/boots shall be assessed and shall be incorporated into operating guidelines or operating policies within the specific department to reduce the risk of foot injuries. Department heads will have the final decision on whether or not the footwear meets departmental requirements.

## **29.11 RESPIRATORS**

Respiratory protection, where necessary, shall be of a type approved for the specific task or hazardous environment (see Section 31 "Respiratory Program" for specific requirements). An employee shall wear the assigned/approved respirator when working in an environment where a respirator is required.

## **SECTION 30**

## **POWERED INDUSTRIAL TRUCKS (FORKLIFTS)**

### **30.1 AUTHORIZED PERSONNEL**

Only authorized, trained and certified personnel shall operate powered industrial trucks or vehicles with fork attachments used to carry, lift, load or stack. Re-certification shall be conducted at least every three years.

### **30.2 WATCHING FOR HAZARDS**

Operators must look in the direction of travel and be alert for potential hazards. Operate with forks as close to the surface as possible (4-6 inches when inside a building).

### **30.3 UNATTENDED VEHICLE**

A vehicle is considered unattended when the operator is 25 feet or more from the vehicle or the vehicle is out of operator's view. When the truck is unattended the controls must be neutralized, power shut off, brakes set and forks grounded. Block wheels if parked on an incline.

### **30.4 PASSENGERS**

Only the operator may ride on the lift truck unless a seat and handholds are provided for a passenger.

### **30.5 ARM AND LEG PLACEMENT**

Never place arms or legs between the uprights of the mast or outside the running lines of the truck.

### **30.6 DIRECTION OF TRAVEL**

On grades in excess of 10 percent, lift trucks are to be driven downgrade with the load following and upgrade with the load ahead.

### **30.7 SEATBELTS**

When provided, seatbelts shall be worn at all times.

## **SECTION 31**

## **RESPIRATORY PROGRAM**

### **31.1 PURPOSE**

The purpose of this program is to control those occupational diseases caused by breathing air contaminated with harmful dusts, fogs, fumes, mists, gases, smokes, sprays, or vapors. The primary objective shall be to prevent atmospheric contamination where feasible by accepted engineering control measures (for example, enclosure of operation, general and local ventilation and substitution of less toxic materials). When effective engineering controls are not feasible, appropriate respirators shall be used pursuant to the requirements of this written program.

### **31.2 IDENTIFICATION AND LOCATION OF AIR CONTAMINANT EXPOSURES**

The City Safety Manager shall conduct air quality evaluations to determine locations where a respirator would be needed. Additional air contaminant monitoring will be conducted whenever exposures are expected to change. For example, whenever new raw materials are used or an operation changes.

### **31.3 RESPIRATOR OPERATION AND USE**

The Operations and Use Manuals for each type of respirator will be made available to all qualified users.

For continued protection of respirator users, the following general use rules *apply*:

- Users shall not remove respirators while in a hazardous environment.
- Respirators are to be stored in sealed containers out of harmful atmospheres.
- Store respirators away from heat and moisture.
- Store respirators such that the sealing area does not become distorted or warped.
- Store respirators such that the face piece is protected.

#### **Face piece seal protection**

Employees with tight-fitting face pieces are not permitted to wear them if:

- Facial hair that comes between the sealing surface of the face piece and the face or that interferes with valve function; or
- Any condition that interferes with the face-to-face piece seal or valve function exists.
- Corrective glasses, goggles or other personal protective equipment interferes with the seal of the face piece to the face of the user.

#### **Continuing Effectiveness of Respirators**

Employees should leave work area to:

- Wash face and respirator face pieces as necessary to prevent eye or skin irritation associated with respirator use.
- Be safe if a vapor or gas breakthrough is detected, changes in breathing resistance or leakage of the face piece occurs.
- Replace the respirator or the filter, cartridge or canister elements.

### **31.4 MEDICAL EVALUATION FOR USERS OF RESPIRATORS**

Prior to assignment to any position requiring respirator use, a medical evaluation of the employee's physical ability to work while wearing a respirator will be necessary. A periodic evaluation identical to the pre-placement evaluation will be done every year. If a change in the employee's medical condition occurs, the interval for periodic evaluation will be established by the physician.

### **31.5 RESPIRATOR USER TRAINING**

1. The user will be instructed in the nature of the hazard or hazards for which the respiratory protection is being provided and informed of possible consequences which may occur if exposed to the hazard without adequate protection. The user will also be

made aware that every reasonable effort is being made to reduce or eliminate the hazard.

2. Instruction will include a discussion of the respirator's capabilities and limitations and discussion of the parts of the device and the function and possible malfunction of each part.
3. A detailed discussion of the user's responsibility for inspection of equipment prior to use and the appropriate points of inspection will be included. Each user will have access to a respirator during this part of training.
4. Instruction and training will include guidance on proper storage, method of obtaining cleaning and maintenance service and methods to assure adequate fit and function of the device each time it is donned.
5. Instructions on obtaining equipment, donning methods, proper fitting and adjustment of the equipment will be given. Each user will then don the equipment in an atmosphere of normal air, prior to a testing exercise.
6. Qualitative fit testing.
7. A record of employee names and the dates and type of initial training and subsequent refresher training will be maintained.

### **31.6 RESPIRATOR CLEANING, MAINTENANCE AND STORAGE**

The respirators shall be cleaned and disinfected when:

- Issued for the exclusive use by an employee. The respirator shall be kept clean and disinfected as needed to maintain a sanitary condition.
- Maintained for emergency use. The respirator shall be cleaned and disinfected after each use.
- Used in fit testing and training. The respirator shall be cleaned and disinfected after each use.

Cleaning and storage of respirators assigned to specific employees is the responsibility of the employee.

Respirators are to be stored as follows:

All respirators shall be stored to protect them from damage, contamination, dust, sunlight, extreme temperatures, excessive moisture and damaging chemicals. The respirator shall be packed or stored to prevent deformation of the face piece and exhalation valve.

Emergency Respirators shall be:

- Kept accessible to the work area;
- Stored in compartments or in covers that are clearly marked as containing emergency respirators; and stored in accordance with any applicable manufacturer's instructions.

### **31.7 PROGRAM EVALUATION**

Evaluations of the workplace are necessary to ensure that the written respiratory protection program is being properly implemented; this includes consulting with

employees to ensure that they are using the respirators properly. Evaluations shall be conducted as necessary to ensure that the provisions of the current written program are being effectively implemented and that it continues to be effective.

Program evaluation will include discussions with employees required to use respirators to assess the employees' views on program effectiveness and to identify any problems. Any problems that are identified during this assessment shall be corrected. Factors to be assessed include, but are not limited to:

- Respirator fit (including the ability to use the respirator without interfering with effective workplace performance);
- Appropriate respirator selection for the hazards to which the employee is exposed;
- Proper respirator use under the workplace conditions the employee encounters; and
- Proper respirator maintenance.

## **SECTION 32            ROPES, CHAINS, AND SLINGS**

### **32.1    GENERAL**

The use of ropes, slings and chains shall be in accordance with the safe usage recommendations of the manufacturer and recommendations of the equipment manufacturer when used in conjunction with other devices. All hooks used to support human loads or loads that pass over workers shall be closed. Hooks, shackles, rings and other fittings that show excessive wear or that have been bent, twisted or otherwise damaged shall be removed from service.

### **32.2    WIRE ROPE SLINGS**

Wire rope slings shall be immediately removed from service if any of the following conditions are present:

- Ten randomly distributed broken wires in one rope lay or five broken wires in one strand in one rope lay.
- Wear or scraping of one-third the original diameter of outside individual wires.
- Kinking, crushing, bird caging or any other damage resulting in distortion of the wire rope structure.
- Evidence of heat damage.
- End attachments that are cracked, deformed or worn.
- Hooks that have been opened more than 15 percent of the normal throat opening measured at the narrowest point or twisted more than 10 degrees from the plane of the unbent hook.
- Corrosion of the rope or end attachments.

### **32.3    SLINGS**

Slings, their fittings and fastenings, shall be inspected prior to use and as necessary during use for evidence of overloading, excessive wear, or damage. Defective slings shall be removed from service. Proper storage shall be provided for slings while not in use.

## **32.4 CHAINS**

Chains used in load carrying service shall be inspected before each initial use and regularly thereafter.

Chains shall be normalized or annealed periodically as recommended by the manufacturer.

Chains shall be removed from service when showing evidence of crack, nicks, lifting or any linkweld, more than 10 percent elongation of any link or section, or when wear of 20 percent of the diameter of any link has occurred.

Hooks, rings, oblong links, pear-shaped links, welded or mechanical coupling links, or other attachments when used with alloy steel chains, shall have a rated capacity at least equal to that of the chain.

Job or shop hooks and links, or makeshift fasteners, formed from bolts, rods, etc., or other such attachments shall not be used.

## **32.5 FIBER ROPE**

Frozen fiber ropes shall not be used.

Fiber rope that has been subjected to acids or excessive heat shall not be used for load carrying purposes.

Fiber rope shall be protected from abrasion by padding where it is fastened or drawn over square corners or sharp or rough surfaces.

All splices in rope slings shall be made in accordance with fiber rope manufacturer's recommendations.

Knots shall not be used in lieu of splices.

Each synthetic web sling shall be marked or coded to show: Name or trademark of manufacturer; rated capacities for the type of hitch; type of material.

## **32.6 LOAD LIMITS**

Load limits as specified by the manufacturer shall not be exceeded under any circumstance.

# **SECTION 33            TOOLS AND EQUIPMENT**

## **33.1 HAND TOOLS**

Employees shall inspect all tools assigned to them daily, to insure they are in good working condition. Defective tools shall be tagged and taken out of service for repair.

Use only properly insulated tools (screwdrivers, wire cutters, etc.) when working around electrical circuits or equipment.

## **33.2 POWER TOOLS AND EQUIPMENT**

Know Your Machine - Before using any electrical tool or piece of machinery, it is important



that you fully understand how it works. If you are at all in doubt, consult your supervisor and review the operating manual.

**Shut It Off** - All power tools and equipment shall be shut off when unattended or not in use. Electrical equipment out of service for maintenance or repair shall comply with the Lockout/Tagout Procedure

**Faulty Equipment** - Employees shall inspect each piece of equipment before use. Watch for bare wiring, loose connections, broken or badly worn parts or loose plates or covers. Under no circumstances are you to operate a piece of faulty equipment. Defective equipment shall be tagged and taken out of service for repairs.

**Proper Grounding** - All electrical equipment must be properly grounded. Never disconnect the ground wire or use an adapter which would negate the effect of the ground.

**Extension Cords & Trouble Lights** - Extension cords shall be in good condition, properly grounded and of proper size to handle the amperage. Trouble lights shall be equipped with globe guards and non-metallic sockets.

### **33.3 DRILL AND DRILL PRESS OPERATION**

Proper eye protection shall be worn (safety glasses with side shields; safety glasses worn with a face shield; or goggles).

Avoid wearing loose gloves, clothing or jewelry.

Material shall be clamped or otherwise fastened to the drill press bed, not held in the hand.

### **33.4 GRINDER OPERATION**

Proper eye protection shall be worn (safety glasses with side shields; safety glasses worn with a face shield; or goggles).

No wheel shall be operated without a guard.

The tool rest and guard shall be adjusted to within 1/8 of an inch of the wheel, but no adjustment shall be made while the wheel is in motion

Grinding on the flat side of the wheel is prohibited.

Out-of-round wheels shall be removed from use.

### **33.5 TABLE SAWS, LATHES, AND JOINERS**

Proper eye protection shall be worn (safety glasses with side shields; safety glasses worn with a face shield; or goggles).

A push block shall be used on table saw and joiner for cutting or planing small stock.

Machine guards shall be in place and utilized.

Position yourself so as not to be in direct line of possible "kick-back".

Shut off machine before removing stock. Never reach over cutting area.

Power shall be off during maintenance.

### **33.6 MOWING AND TRIMMING**

Proper ear, eye, and foot protection (no tennis shoes) shall be worn.

Inspect area first and remove all debris.

Cut with discharge chute pointed down and in opposite direction of people, buildings, vehicles and play areas.

**Never attempt to fix a problem yourself; bring the unit in to a trained technician.**

### **33.7 GAS CYLINDER STORAGE**

Oxygen, air or any other compressed gas cylinders must be placed in racks or must be secured at all times and properly identified. Compressed gas cylinders must be protected from the weather, heat source and from impact by vehicles or equipment. Oxygen cylinders in storage shall be separated a minimum of 20 feet from fuel gas cylinders unless separated by an appropriate fireproof wall. All lines between cylinders and points of use shall be adequately identified.

## **SECTION 34 TREE TRIMMING AND CHAINSAWS**

### **34.1 GUIDE FOR CHAIN SAW SAFETY**

1. Pick the proper saw for the job.
2. Have a thorough knowledge of the operating procedures for the saw you intend to use, and be sure you can make normal operating adjustments.
3. Be sure the saw is properly adjusted and ready to run.
  - a. All screws, nuts and bolts should be snug.
  - b. The handles should be in good condition.
  - c. The muffler must be operational.
  - d. The chain must be sharp and properly adjusted.
  - e. Chain catch is in place and in good condition.
4. Use the correct fuel mix and chain oil.
5. Be sure your fuel can has a prominent label and filler hose.
6. Dress properly with snug clothing, safety shoes, hard hat, gloves, eye guards, and hearing protectors.
7. Make sure you know cutting techniques before you begin.
8. Inspect the job before you begin to work, and establish an escape route.
9. Clean up debris before working if it poses a hazard.
10. Make sure other workers stay clear of the saw operator.
11. Refuel safety - shut off the saw, choose a clean area, do not smoke and keep the fuel off the muffler. Move away from the refueling area before starting the saw.
12. Use extreme care when using a saw aloft in a tree.
13. Don't rush and stay alert.

### **34.2 TRIMMING**

Rope off or barricade the area to keep civilians out of the work area.

Use flagmen to control the direction of traffic through the work area when working adjacent to a highway.

The climber should remove all knives, pens, and other objects from his pockets that could cause discomfort while climbing or injury in a fall.

Before climbing the tree, the worker should plan how the job will be done and select a crotch for tying in his climbing safety line.

Watch for power lines. Assume that all lines are energized unless the power company is present.

Power lines expose climbers to serious burn and electrocution hazards. Only a qualified line clearance tree trimmer should be assigned to the work if it is found that an electrical hazard exists.

Ladders should be used to reach the highest working crotch possible. The ladder should be held in place by the ground man and removed once the climber is aloft.

Climbers may elect to pull themselves up to a low first crotch. It is recommended that a worker never shin a tree for a distance greater than 15 feet or shin for any distance beyond his capabilities.

The climbing line should be installed as soon as possible and the worker tied in with a taut line hitch. An approved arborist should check the climbing knot frequently to ensure the security of the knot and the safety line.

A figure-eight knot should be tied at the end of the climbing line, particularly when working in high trees. This will prevent pulling the end of the rope through the working climbing knot and avoid a serious fall injury.

Chain saws and other equipment should be raised to the climber with a separate hand line. This will help avoid accidental damage to the climbing line by sharp chains and saw blades.

Guide ropes or tag lines should be used to help ensure that falling branches do not damage stationary objects on the ground.

The climber should position himself so that he/she is above and away from the cutting area. The chain saw should be clipped to the saddle or secured from a chain saw lanyard when not in use.

Aerial rescue procedures should be established and rescue skills practiced to ensure that all crew members are capable of effecting immediate rescue of an injured climber from a tree.

### **34.3 FELLING OPERATIONS**

Felling operations usually require all of the equipment mentioned previously and often involves the use of climbing spurs for topping out the tree prior to felling. Climbing spurs should be of the tree-climbing type and should have gaffs (or spikes) long enough for the tree.

Straps used to fasten the spurs to the climber's legs should be checked for rotting and other damage.

Before felling any tree, the worker should carefully consider:

1. The tree and surrounding area for anything that may cause problems as the tree falls

2. The shape of the tree
3. The lean of the tree
4. Wind force and direction
5. Decayed or other weak spots
6. The location of other persons, equipment, buildings, and other stationary objects

Rope and barricade the area to keep civilians out of the work site.

Use flagmen to control and direct traffic through the work area when working adjacent to the roadway.

Post an experienced observer to direct the felling operation and to watch clearance from power lines.

Check the ground where the tree will fall for poles, tools, and debris that might be thrown.

A tag line should be secured at the top of the main lead as an added safety measure during felling operations.

The tag line should be laid out in the direction the tree will fall. Clear brush and debris from around the tree base. Clear an escape path at least 25 feet to the rear of the tree and at a 45-degree angle from the direction of the fall. Plan an alternate escape route just in case. If you are working with a partner, plan which direction each of you will go.

Tag lines can be secured to a truck or a winch to help ensure the falling direction of the tree, or crew members can be used at the end of the tag line to guide the falling trunk.

Linemen should never wrap the tag line around their bodies. A sudden gust of wind or mistake could cause him/her to be dragged along with the falling trunk and could result in serious injury. The line should be draped across the shoulders so that the worker can let go quickly in an emergency.

Space yourself at least two tree-lengths away from other tree fallers, to protect both yourself and them. Never work up-slope or down-slope from others. Fell trees down-slope, never directly uphill. Do not work in high winds.

A notch should be used in felling all trees over five inches in diameter at chest height. No trees should be felled by "ripping" or "slicing" cuts. Notch penetration should be about one-third of the diameter of the tree.

The angle of the notch should be ~90 degrees in relation to the first cut.

The back cut or bore cut should be made two inches above the level of the notch angle apex to help prevent tree kickback when falling. The cut should be straight and horizontal.

Wedges may be used during the back cut to prevent the tree from pinching the saw. Plastic or soft metal wedges should be used in the event the saw chain contacts the wedge.

Personnel in the felling area should be warned before starting the bore cut. The saw operator should not cut through the "holding wood" on either side or the tree may spin off the stump as it falls. A hinge of wood should be left between the back cut and the notch to help ensure proper fall of the tree.

## **34.4 LIMBING AND BUCKING**

Only one saw operator should conduct limbing operations at a time. The operator should stand on the opposite side of the trunk from the limb being cut. The saw operator should stand uphill of a tree felled on a side hill or incline and should be sure of firm footing.

Limbs supporting the trunk should be undercut to avoid pinching the saw.

Large saws may be used for cutting larger limbs, but should only be used at waist height and lower to help ensure full control of the saw. Prior to bucking or cutting the tree into sections, the tree should be blocked, if necessary, to prevent rolling and the operator should stand on the uphill side.

Large sections or pieces of trunk may have to be moved to complete some cuts. Cuts should be planned carefully to remove as much trunk weight as possible prior to rolling.

A cant hook, lever, or other equipment may be used to move large sections.

Trunk cuts should be made small enough to permit easy handling if cranes, winches, or loaders are not available to handle large sections.

## **34.5 FIRE PREVENTION PRINCIPALS**

Gasoline should be carried in approved safety containers equipped with a self-closing lid and fitted with a spark arrestor screen in the spout. Pouring should be through an attached, flexible spout or funnel.

Gasoline should not be stored in glass jars, plastic jugs, or other unapproved containers.

Use a proper oil and gasoline mixture to minimize carbonization.

Keep a filled ABC dry chemical fire extinguisher with the power saw.

Smoking must be prohibited when refueling. The gasoline tank should never be filled when the motor is running or hot. Gasoline spilled on the tank or motor should be wiped off before the motor is started.

Fill the chain saw tank in a cleared area, but do not fill completely so spilling can be prevented.

Do not start the motor at the place where the tank was filled.

Keep the saw clean of saw dust, gasoline, and oil.

Maintain the muffler in good condition.

Keep spark plugs and wire connections tight.

Gasoline and oil-soaked rags are a fire hazard and should not be stored inside cabinets where they could spontaneously ignite. Soiled rags should be stored inside a metal container with a tight-fitting lid and should be disposed of as soon as possible.

Keep flammable material away from the point of the saw cut.

Before moving from a cut, check for burning embers.

Workers should stay in the area for 15 minutes after ceasing to use power saws to check for

signs of fire.

Do not use gasoline, solvents, or other flammable agents to clean clothing. A spark may ignite your clothing.

Notify your supervisor if you see an empty fire extinguisher or an unsafe condition which could be a fire hazard.

## **SECTION 35      WELDING**

### **35.1    GENERAL**

All welding, cutting and brazing shall be performed in a manner consistent with SPS and OSHA 29CFR 1910.251-1910.255 regulations.

### **35.2    PERSONAL PROTECTIVE EQUIPMENT**

You must wear approved welders safety equipment suitable for the materials being used. This includes flame-resistant clothing, respirators, aprons, face shield, goggles, gloves, etc.

### **35.3    FIRE PROTECTION**

All work shall be performed in compliance with National Fire Protection Association (NFPA) Standard 51B. You are required to inspect the welding area before and after completion of work for fire or other hazards. You must have immediate access to an approved type of portable fire extinguisher.

### **35.4    SHIELDS**

You are required to surround your work with approved shields when persons in surrounding areas could be affected and to protect adjacent combustible materials. Shields shall not seriously impede required ventilation.

### **35.5    VENTILATION**

Adequate general or local ventilation must be maintained.

### **35.6    WORK IN CONFINED SPACES**

Welding, cutting, or brazing in confined spaces requires air replacement with respirable air to replace withdrawn air or the use of NIOSH-MSHA approved air-line respirators or hose masks. All work in confined spaces shall be performed in compliance with the city's confined space entry procedures.

### **35.7    APPROVED LIGHTERS**

You must use an approved type of lighter to light the blowpipe.

### **35.8    FLASH BACK VALVES**

All acetylene tanks shall be equipped with flash back valves, and acetylene tanks shall not be used if the pressure exceeds 15 pounds.

### **35.9 HOT WORK PERMIT**

When welding in a confined space or near hazardous chemicals, complete a **Hot Work Permit**.

### **35.10 EQUIPMENT STORAGE**

Compressed gas cylinders used for welding must be sufficiently bled of any pressure to the regulator and/or lines and must be completely turned off when not in use.

## **SECTION 36 WORK ZONE SAFETY**

Whenever operations are taking place in streets, parkways, sidewalks or other places where citizens as well as employees may be endangered, the supervisor or crew leader on the work site is as responsible for the safety of the public in this type of operation as for getting the job done. The supervisor must spend ample time before, during and after the work to protect employees and the public from hazards created by this work. The following procedures are to be followed:

1. All City departments needing to obstruct the Public Right-of-Way (roadways, sidewalks and public alleys) in part or in full shall acquire a "Street Obstruction Permit" from the Department of Public Works prior to starting any work.
2. If street construction or repair work is to be done, preparations shall be made to assure vehicle and pedestrian safety before such work is allowed to begin.
3. If traffic is affected by the operation, proper signing shall be used to warn in advance of the work area and traffic control signs in and around the affected area are to be correctly placed and maintained through the period when work is being performed and traffic obstructions exist.
4. Where barricades and signs are used overnight, supervisors shall examine the work area for proper placement at the end of the workday.
5. Lighted barricades shall be used whenever possible for overnight protection.
6. Where traffic must be periodically stopped or obstructed by workers or equipment in the traveled portion of a roadway, a flagman wearing a protective vest will be stationed.
7. All workers in or near the roadway will wear reflective vests or cross straps on their clothing while at the work site.
8. Flagmen will be used to slow or direct traffic where the approach to the work area does not provide adequate visibility to drivers.

### **36.1 PEDESTRIAN SAFETY**

When pedestrian traffic is impeded, official municipal barricades, restrictive tape or other restraint shall be used to keep the public from the work site.

Holes in the sidewalk or parkway which must be left open will be covered whenever possible along with perimeter protection. Every possible means of preventing accidental

entry into the hole shall be used. Keep in mind that darkness and snow can complicate this situation.

Where an unusual situation exists that cannot be easily resolved or when personal injury, damage to equipment or property occurs as a result of operations, contact the responsible supervisor immediately.

## **36.2 WORK ZONE PROTECTION**

All work zones in the roadway, on the right-of-way, in designated parking areas or on a sidewalk shall have the proper warning signs and be barricaded in accordance with the latest edition of the Manual on Uniform Traffic Control Devices (MUTCD) and Wisconsin supplement.

If you are unsure of the proper method for barricading and signing a work zone, you must contact your supervisor immediately.

Wear ANSI 107 approved retro-reflective clothing as required by SPS 332.39.

All city vehicles should have the most recent version of the ***“Work Zone Safety”*** laminated handbook and most recent version of the ***“Flagger’s Handbook”*** (if conducting flagging operations) in each vehicle cab that is involved in work zones.

Should there be a dispute as to whether or not a job site in the street, parkway or sidewalk is adequately marked, the supervisor shall be the deciding authority. Remove or cover all signs or devices that are not needed. All work zone setups should be documented.



## **APPENDIX –BBP LIST**

# **Job Titles in the Blood Borne Pathogen Program**

## **Fire Department**

### **Administrative**

Chief (Fire)  
Assistant Chief (Fire)  
Division Chief (Fire Administration)  
Division Chief (EMS Administration)

### **Support**

Captain (EMS)  
Captain (Training)  
Captain (Fire Prevention)  
Lieutenant (Code Enforcement)  
Lieutenant (Public Education)  
Lead Mechanic  
Mechanic

### **Operations**

Battalion Chief  
Captain (Line)  
Lieutenant (Line)  
Engineer  
Fire Fighter

## **Parks, Recreation, & Forestry**

### **Parks**

Park Superintendent  
Asst. Park Superintendent  
Grounds Supervisor  
Facility and Equipment Supervisor  
Sports Field Lead worker  
Mowing/Maintenance Lead worker  
Trades Lead worker  
Equipment Lead worker  
Maintenance Specialist II:  
    Carpenter  
    Mechanic/Welder  
    Painter  
    Carpenter  
Maintenance Specialist I:  
    Pools and HVAC Maintenance Worker  
Maintenance Worker  
Building Maintenance Worker  
Custodians  
Cleaners

### **Recreation**

Recreation Superintendent  
Recreation Supervisor  
Seasonal Employees

### **Special Facilities**

Special Facilities Manager  
Special Facilities Assistant Manager  
Seasonal Employees

### **Wildlife Sanctuary**

Wildlife Sanctuary Director  
Wildlife Sanctuary Assistant Director  
Curator of Animals

Senior Animal Keeper  
Chief Naturalist  
Naturalist  
Ranger

### **Forestry**

City Forester  
Asst. City Forester  
Forestry Worker II  
Forestry Worker I  
Maintenance Specialist II:  
Seasonal Employees

## **Community Services**

### **Green Bay Housing**

Building Services Coordinator  
Building Custodian II  
Cleaner

## **Police Department**

### **Administrative**

Police Chief  
Assistant Police Chief

### **Investigations Division**

Lieutenants  
Detectives  
Gang Officer  
School Resource Officers  
Officers  
Hispanic Community Liaison  
Neighborhood Coordinator  
Lead Officer (Photo ID)  
Evidence Techs

### **Operations Division**

Captain (Division)  
Captain (Shift Captain)  
Lieutenants

### **Districts**

Captains (District)

### **Vehicle Maintenance**

Mechanic (Head)  
Mechanics  
Mechanic (Asst.)

### **Support Services**

Building Services Supervisor  
Custodians

## **Public Works**

### **Operations Division**

#### **Motor Equipment Section**

Shop Helper  
Mechanic Lead worker  
Senior Mechanic

#### **Sanitation Section**

Sanitation Truck Drivers  
Sanitation Laborer  
Building Custodian

**Street and Parking Section**

Equipment Operator  
Tractor Operator  
Truck Driver  
Sign Laborer  
Sign Lead worker  
Sign Operator  
Sign Laborer/Lead worker  
Maintenance & Enforcement Attendant  
Custodian  
Maintenance & Operations Attendant

**Sewer and Bridge Section**

Sewer Lead worker  
Sewer Maintenance Worker  
Sewer Laborer

**Electrical**

Electrical Lead worker  
Electricians

**Transit**

**Maintenance**

Mechanics  
Cleaner  
Fueler/Bus Cleaner  
Groundskeeper

## **APPENDIX – FORMS**

## NEAR MISS REPORT

A near miss is a potential hazard or incident that has not resulted in any personal injury. Unsafe working conditions, unsafe employee work habits, improper use of equipment or use of malfunctioning equipment have the potential to cause work related injuries. It is everyone's responsibility to report and/or correct these potential accidents/incidents immediately. Please complete this form as a means to report these near miss situations.

Department/Location: \_\_\_\_\_ Date: \_\_\_\_\_  
Time: \_\_\_\_\_ ( ) AM ( ) PM

Please check all appropriate conditions:

- ( ) Unsafe Act
- ( ) Unsafe Condition
- ( ) Unsafe Use of Equipment-- Equipment Type and Model: \_\_\_\_\_
- ( ) Unsafe Equipment -- Equipment Type and Model: \_\_\_\_\_

Description of the incident or potential hazard: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

(Keep in mind when describing the incident or potential hazard question such as **Who** was involved in the near miss; **What** exactly happened; **Where** did the incident occur; **When** did the incident occur and **How** did the incident occur. These questions should be addressed.)

Employee Signature: \_\_\_\_\_ Date: \_\_/\_\_/\_\_

Near Miss Follow-up  
(To be completed by the supervisor.)

What steps have been complete or will be completed to prevent a similar incident? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Who is responsible for taking these actions and following up to ensure completion? \_\_\_\_\_

Expected Completion Date: \_\_/\_\_/\_\_ Actual Completion Date: \_\_/\_\_/\_\_

**Severity** - Check the level of severity which you feel could occur if such as incident evolved.

- ( ) HIGH- fatality or permanent disability and/or large property damage potential;
- ( ) MEDIUM - temporary disability and/or low property damage potential;
- ( ) LOW - only minor injury and no property damage

Supervisor's Signature: \_\_\_\_\_ Date: \_\_/\_\_/\_\_

**APPENDIX B  
CITY OF GREEN BAY - CONFINED SPACE ENTRY PERMIT - (POST AT JOB SITE)**



**Department(s) involved in Confined Space Entry:** ☐ DPW ☐ Parks ☐ Water ☐ Transit ☐ Fire

**Space to be entered:** \_\_\_\_\_ **Location/Building:** \_\_\_\_\_

**Purpose of Entry:** \_\_\_\_\_ **Date:** \_\_\_\_/\_\_\_\_/\_\_\_\_ **Start Time :** \_\_\_\_\_ AM/PM

**PERMIT SPACE HAZARDS:** (Indicate specific hazards)

- ☐ Oxygen deficiency/enrichment (<19.5% or > 23.5%)
- ☐ Flammable gases or vapors (greater than 10% of LFL)
- ☐ Airborne combustible dust (meets or exceeds LFL)
- ☐ Toxic gases or vapors (greater than PEL)
- ☐ Fall hazard
- ☐ Mechanical hazards
- ☐ Electrical shock
- ☐ Materials harmful to skin
- ☐ Engulfment/Flash flooding
- ☐ Other: \_\_\_\_\_

**PREPARATION FOR ENTRY:** (please check)

- ☐ Notification of affected departments of service interruption

**Isolation methods:**

- ☐ Lockout/Tagout ☐ Barriers ☐ Ventilate
- ☐ Purge/Clean ☐ By Pass Method ☐ Blank/blind
- ☐ Other: \_\_\_\_\_

**Personnel Awareness:**

- ☐ Pre-entry briefing on specific hazards and control methods
- ☐ Notify contractors of permit hazards and control methods
- ☐ Other: \_\_\_\_\_

**Additional permits required and/or attached:**

- ☐ Hotwork ☐ Line Breaking ☐ Other: \_\_\_\_\_

**REQUIRED EQUIPMENT:**

**Personal Protective Equipment:**

- ☐ Safety Harness ☐ Safety Life line ☐ Hearing Protection
- ☐ Gloves - Type \_\_\_\_\_ ☐ Hard Hat
- ☐ Eye Protection \_\_\_ Goggles \_\_\_ Safety Glasses \_\_\_ Face Shield
- ☐ Respiratory Protection - Type \_\_\_\_\_

**Atmospheric Tester:**

**Name:** \_\_\_\_\_ **SN/ Model:** \_\_\_\_\_

**Rescue Equipment:**

- ☐ Tripod ☐ Lifeline ☐ Winch System

**Other: (List)** \_\_\_\_\_

**COMMUNICATION PROCEDURES/METHOD: (List)**

**AUTHORIZED ENTRANTS:** (List by name or attach roster.)

**AUTHORIZED ATTENDANTS:** (List by name)

**DESIGNATED EMERGENCY RESCUE SERVICE:**

Green Bay Fire Department (GBFD) 911-EMERGENCY ENTRY RESCUE

- ☐ Cell Phone (must be on-site and tested for signal prior to entry)

**GBFD Battalion Chief was notified prior to entry - contact either East Side or West Side Battalion Chief**

- ☐ Confined Space Entry - East Side of River contact Battalion Chief #1 (821-5041), if no answer leave message or
- ☐ Confined Space Entry - West Side of River contact Battalion Chief #3 (821-5040), if no answer leave message

Parameter	Acceptable Conditions	Pre-Entry 4 ft.	Pre-Entry 8 ft.	Pre-Entry 12 ft.	Pre-Entry 16 ft.	Result	Result	Result
Time Reading taken	_____	AM/PM	AM/PM	AM/PM	AM/PM	AM/PM	AM/PM	AM/PM
Tester Initials	_____							
Oxygen	19.5% to 23.5%							
Flammability	< 10% LEL/LFL							
H2S	<10 PPM							
CO	<35 PPM							
Other								

**AUTHORIZATION BY CONFINED SPACE ENTRY SUPERVISOR(S)**

I certify that required precautions have been taken and necessary equipment is provided for safe entry and work in this confined space.

PRINTED NAME	SIGNATURE	DATE	TIME

**CANCELLATION OF CONFINED SPACE ENTRY**

If a confined space entry is cancelled for any reason, list time and reason for cancellation.

Date: _____	Time: _____ AM/PM	Reason for cancelling confined space entry: _____
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Yellow-Jobsite

White-Department

Pink-Risk

**TRENCHING – COMPETENT PERSON CHECKLIST FORM**

Location: \_\_\_\_\_ Date: \_\_\_\_/\_\_\_\_/\_\_\_\_

Reason: \_\_\_\_\_ Competent Person \_\_\_\_\_

1. Soil Classification (Type A, B, or C): \_\_\_\_\_ Comments: \_\_\_\_\_

2. Surface Encumbrments: Yes [ ] No [ ] Comments: \_\_\_\_\_

3. Utilities Involved: Yes [ ] No [ ] Comments: \_\_\_\_\_

4. Overhead Lines: Yes [ ] No [ ] Comments: \_\_\_\_\_

5. Trench Dimensions: Length \_\_\_\_\_ Width \_\_\_\_\_ Depth \_\_\_\_\_

6. Method of Protective System:

A. Shield: Yes [ ] No [ ] Comments: \_\_\_\_\_

B. Shoring: Yes [ ] No [ ] Comments: \_\_\_\_\_

C. Sloping: Yes [ ] No [ ] Comments: \_\_\_\_\_

7. Air Quality Readings (mandatory)

	Top	4"	8"	12"	16"
Oxygen (>19.5%)	_____	_____	_____	_____	_____
CO (<35 ppm)	_____	_____	_____	_____	_____
H <sub>2</sub> S (<10 ppm)	_____	_____	_____	_____	_____
Combustibility (<10%)	_____	_____	_____	_____	_____

8. Mechanical Ventilation: Yes [ ] No [ ] Comments: \_\_\_\_\_

9. Ladder used (must extend 3' above trench or protective system): Yes [ ] No [ ]  
Comments: \_\_\_\_\_

10. Traffic Control: Yes [ ] No [ ] Comments: \_\_\_\_\_

11. General Safety Checklist:

Barricades: Yes [ ] No [ ]

Fencing: Yes [ ] No [ ]

Plating Material: Yes [ ] No [ ]

Competent Person: \_\_\_\_\_

Signature

**NOTE: Contact "911" if an emergency arises.**



**Full Body Harness**  
**Annual Inspection Checklist**

Harness Model/Name: \_\_\_\_\_  
 Serial Number: \_\_\_\_\_ Lot Number: \_\_\_\_\_  
 Date of Manufacture: \_\_\_\_\_ Date of Purchase: \_\_\_\_\_  
 Comments: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

<b><u>General Factors</u></b>	<b><u>Accepted/Rejected</u></b>	<b><u>Supportive Details/Comments</u></b>
1) <b>Hardware:</b> includes D-rings, buckles, keepers and back pads. Inspect for damage, distortion, sharp edges, burrs, cracks and corrosion.	Accepted  Rejected	
2) <b>Webbing:</b> inspect for cuts, burns, tears, abrasions, frays, excessive soiling and discoloration.	Accepted  Rejected	
3) <b>Stitching:</b> inspect for pulled or cut stitches.	Accepted  Rejected	
4) <b>Labels:</b> inspect, making certain all labels are securely held in place and are legible.	Accepted  Rejected	
5) Other:	Accepted  Rejected	
6) Other:	Accepted  Rejected	
7) <b>Corrective Action taken:</b>		
<b>Supervisor signature:</b>		
<b>Inspected By:</b>		
<b>Date Inspected:</b>		

**Lanyards**  
**Annual Inspection Checklist**

Lanyard Model/Name: \_\_\_\_\_  
 Serial Number: \_\_\_\_\_ Lot Number: \_\_\_\_\_  
 Date of Manufacture: \_\_\_\_\_ Date of Purchase: \_\_\_\_\_  
 Comments: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

<b><u>General Factors</u></b>	<b><u>Accepted/Rejected</u></b>	<b><u>Supportive Details/Comments</u></b>
1) <b>Hardware:</b> includes snaphooks, carabineers, adjusters, keepers, thimbles and D-rings. Inspect for damage, distortion, sharp edges, burrs, cracks, corrosion and proper operation.	Accepted  Rejected	
2) <b>Webbing:</b> inspect for cuts, burns, tears, abrasions, frays, excessive soiling and discoloration.	Accepted  Rejected	
3) <b>Stitching:</b> inspect for pulled or cut stitches.	Accepted  Rejected	
4) <b>Synthetic Rope:</b> inspect, for pulled or cut yarns, burns, abrasions, knots, excessive soiling and discoloration.	Accepted  Rejected	
5) <b>Energy Absorbing Component:</b> inspect for elongation, tears and excessive soiling.	Accepted  Rejected	
6) <b>Labels:</b> inspect, making certain all labels are securely held in place and are legible.	Accepted  Rejected	
7) <b>Corrective Action taken:</b>		
<b>Supervisor signature:</b>		
<b>Inspected By:</b>		
<b>Date Inspected:</b>		

**Snaphooks/Carabineers**  
**Annual Inspection Checklist**

Hook/Carabineer Model/Name: \_\_\_\_\_

Serial Number: \_\_\_\_\_

Lot Number: \_\_\_\_\_

Date of Manufacture: \_\_\_\_\_

Date of Purchase: \_\_\_\_\_

Comments:

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<b><u>General Factors</u></b>	<b><u>Accepted/Rejected</u></b>	<b><u>Supportive Details/Comments</u></b>
1) <b>Physical Damage:</b> inspect for cracks, sharp edges, burrs, deformities and locking operations.	Accepted  Rejected	
2) <b>Excessive Corrosion:</b> inspect for corrosion, which affects the operation and/or the strength.	Accepted  Rejected	
3) <b>Markings:</b> inspect and make certain marking(s) are legible.	Accepted  Rejected	
4) Other:	Accepted  Rejected	
5) Other:	Accepted  Rejected	
6) Other:	Accepted  Rejected	
7) <b>Corrective Action taken:</b>		
<b>Supervisor signature:</b>		
<b>Inspected By:</b>		
<b>Date Inspected:</b>		

**Self-Retracting Lanyard/Lifeline**  
**Annual Inspection Checklist**

Self-Retracting Lanyard/Lifeline Model/Name: \_\_\_\_\_  
 Serial Number: \_\_\_\_\_ Lot Number: \_\_\_\_\_  
 Date of Manufacture: \_\_\_\_\_ Date of Purchase: \_\_\_\_\_  
 Comments: \_\_\_\_\_

<b><u>General Factors</u></b>	<b><u>Accepted/Rejected</u></b>	<b><u>Supportive Details/Comments</u></b>
1) <b>Impact Indicator:</b> inspect indicator for activations (rupture or red stitching, elongated indicator, etc.)	Accepted  Rejected	
2) <b>Screws/Fasteners:</b> inspect for damage and make certain all screws and fasteners are tight.	Accepted  Rejected	
3) <b>Housing:</b> inspect for distortion, cracks and other damage. Inspect anchoring loop for distortion or damage.	Accepted  Rejected	
4) <b>Lanyard/Lifeline:</b> inspect, for cuts, burns, tears, abrasions, frays, excessive soiling and discolorations (see impact indicator on equipment).	Accepted  Rejected	
5) <b>Locking Action:</b> inspect for proper lock-up of brake mechanism.	Accepted  Rejected	
6) <b>Retraction/Extension:</b> Inspect spring tension by pulling lanyard out fully and allowing to retract fully (lifeline must be taut with no slack).	Accepted  Rejected	
7) <b>Hooks/Carabineers:</b> Inspect for physical damage, corrosion, proper orientation and markings.	Accepted  Rejected	
8) <b>Labels:</b> Inspect labels for legibility and security.	Accepted  Rejected	
7) <b>Corrective Action taken:</b>		
<b>Supervisor signature:</b>		
<b>Inspected By:</b>		
<b>Date Inspected:</b>		

